

Fig. 1A

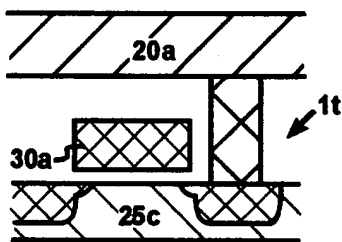


Fig. 1B

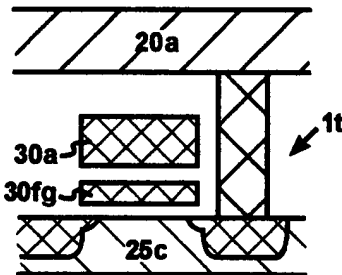


Fig. 1DA

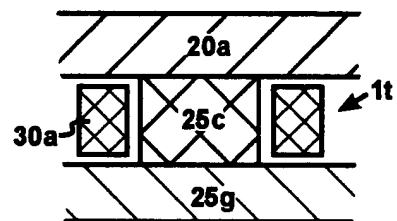


Fig. 1DB

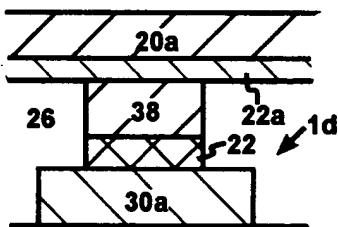


Fig. 1C

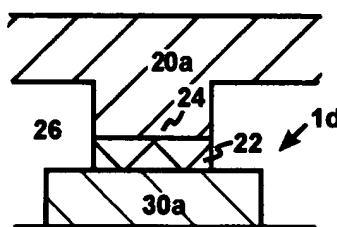


Fig. 1EA

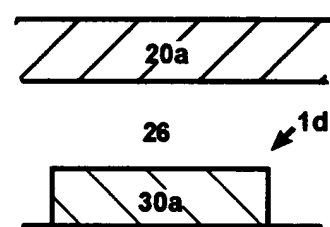


Fig. 1EB

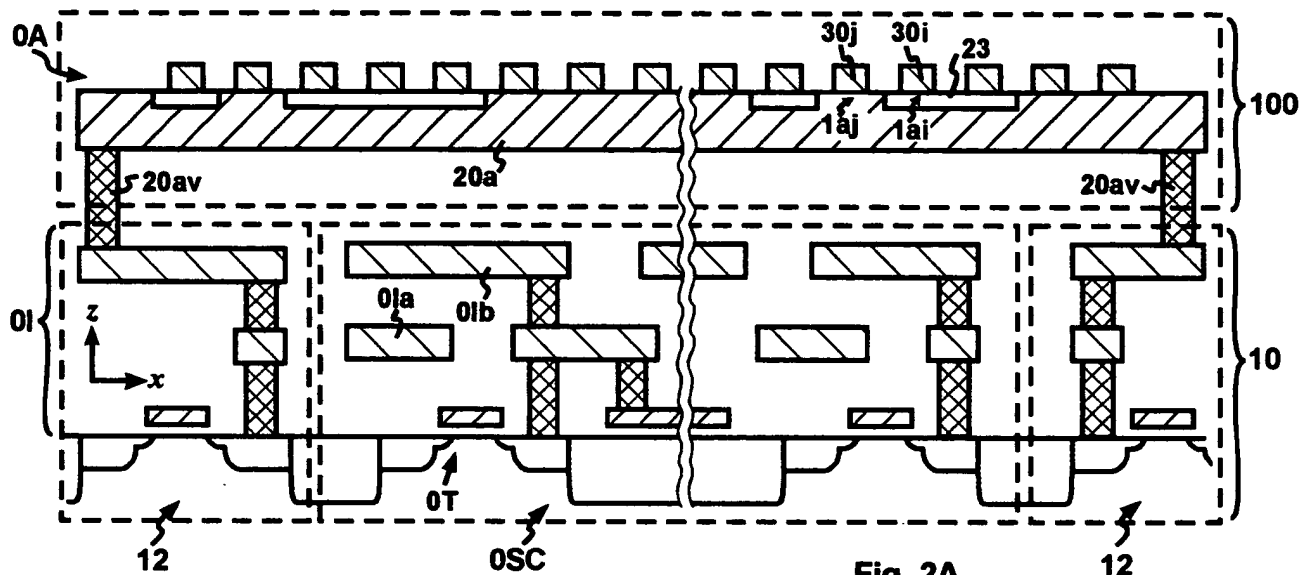


Fig. 2A

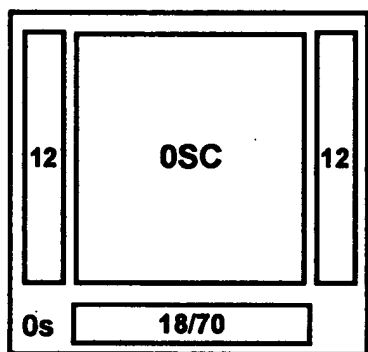


Fig. 2B

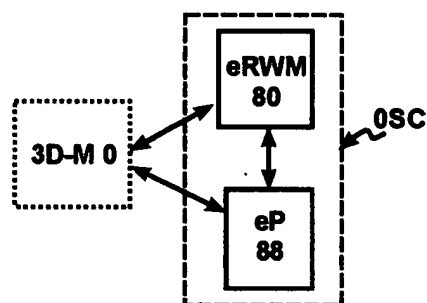


Fig. 2C

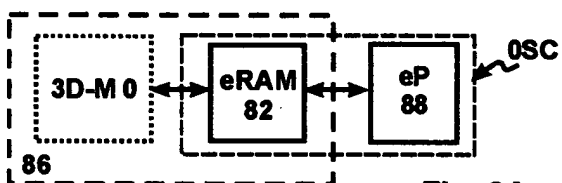


Fig. 3A

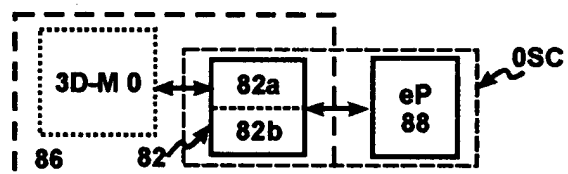


Fig. 3B

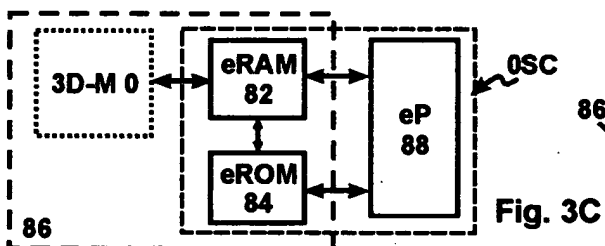


Fig. 3C

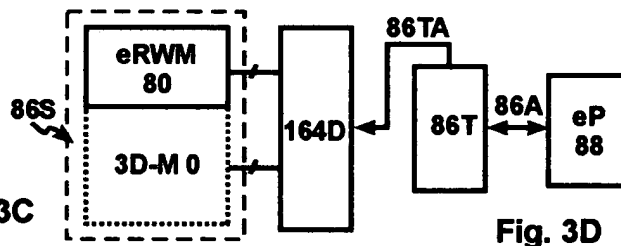


Fig. 3D

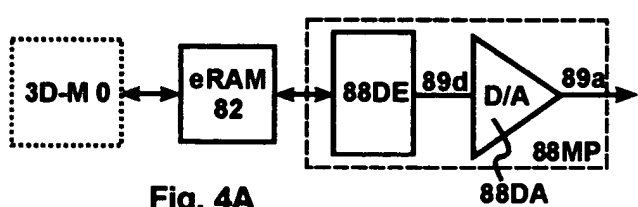


Fig. 4A

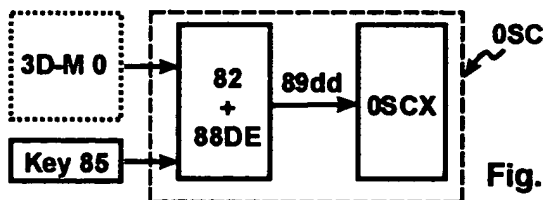


Fig. 4B

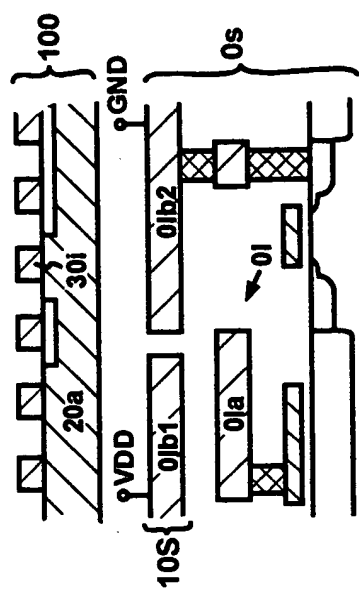


Fig. 5CA

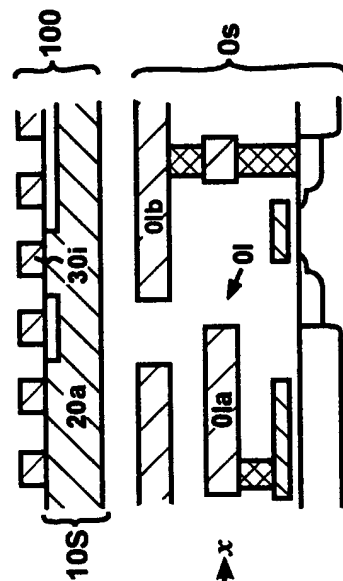


Fig. 5BA

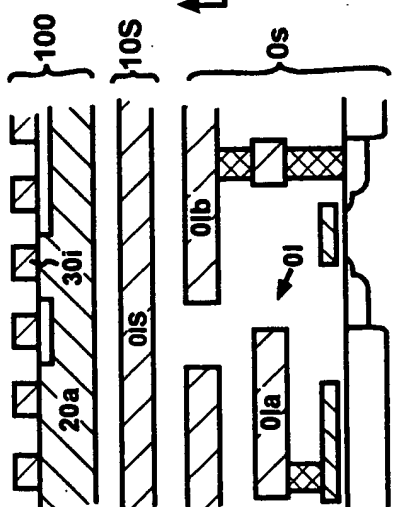


Fig. 5AA

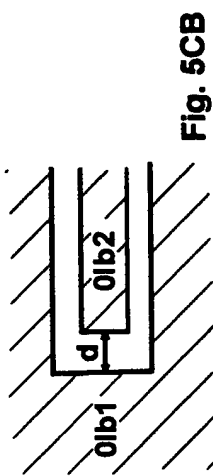


Fig. 5CB

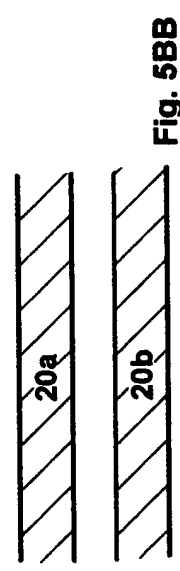


Fig. 5BB



Fig. 5AB

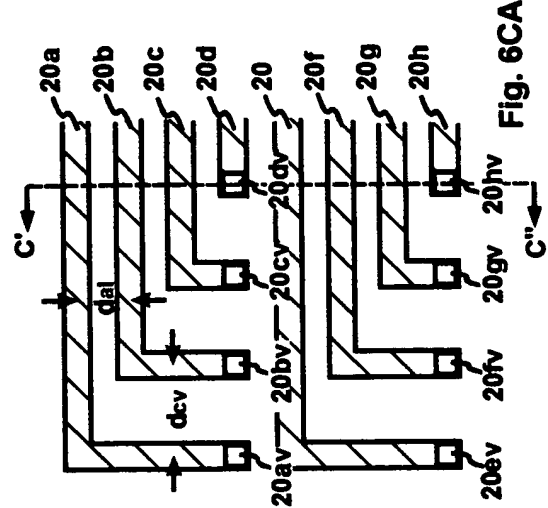


Fig. 6CA

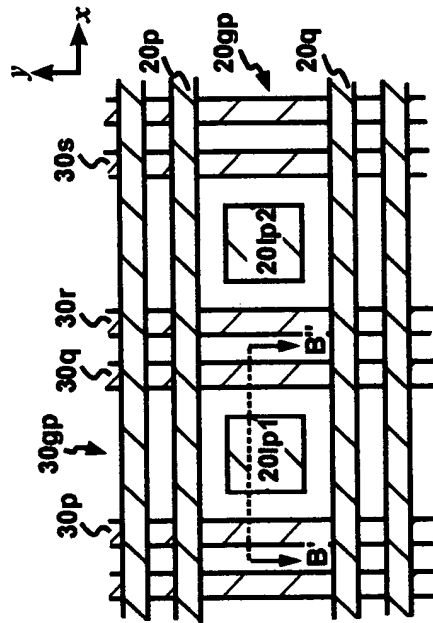


Fig. 6BA

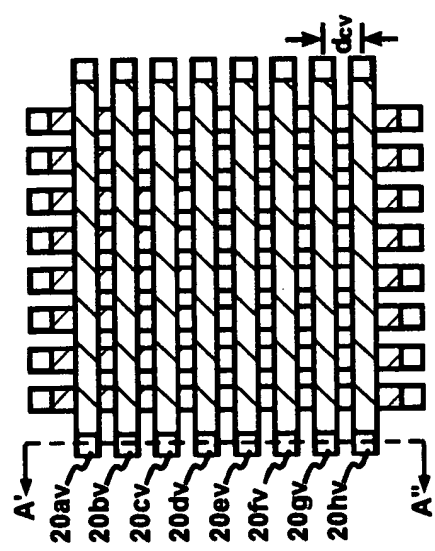
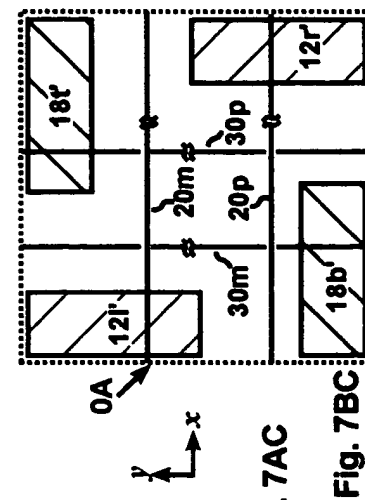
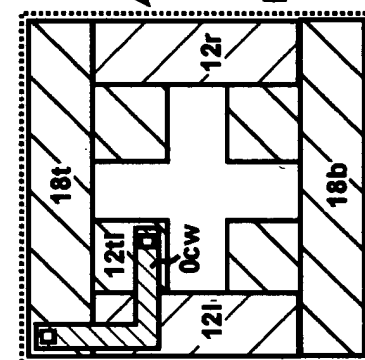
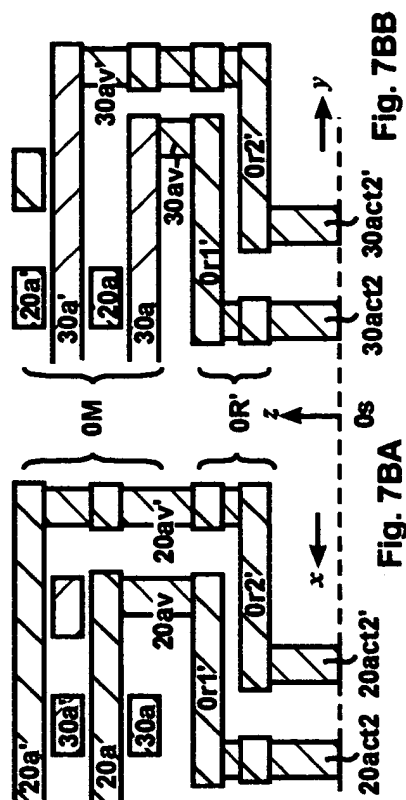
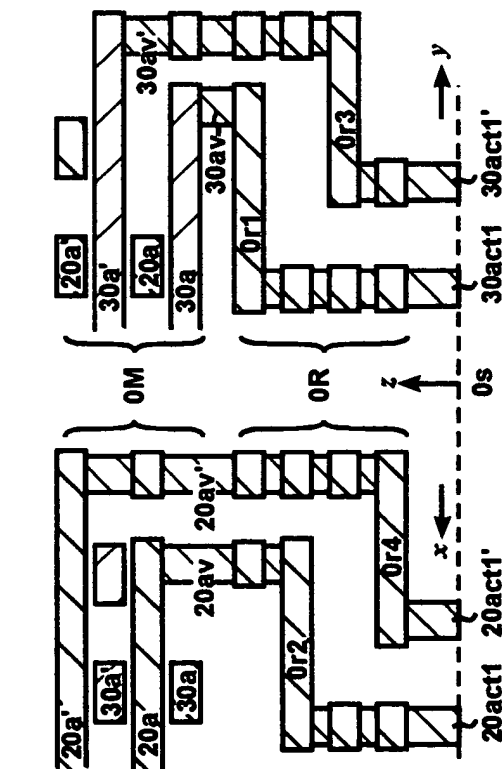
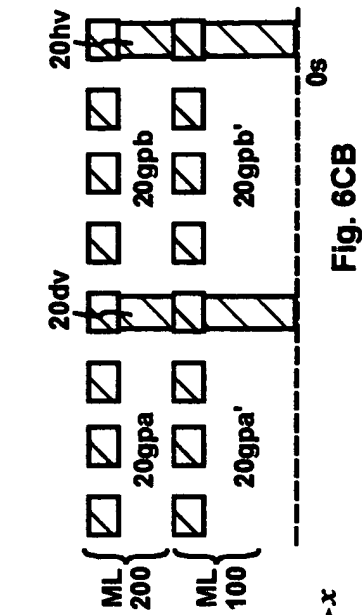
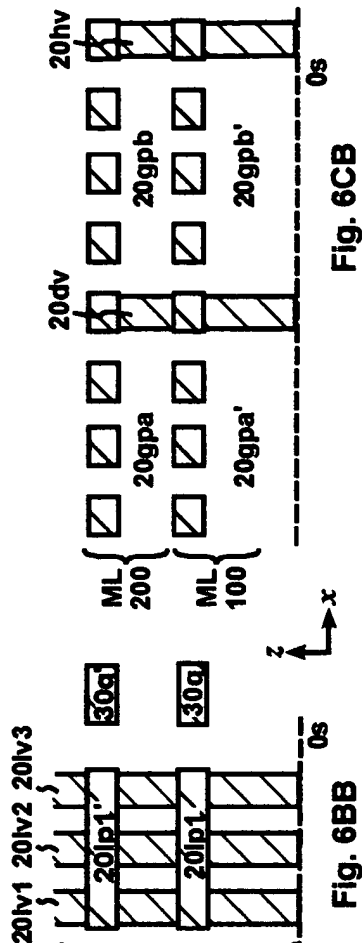
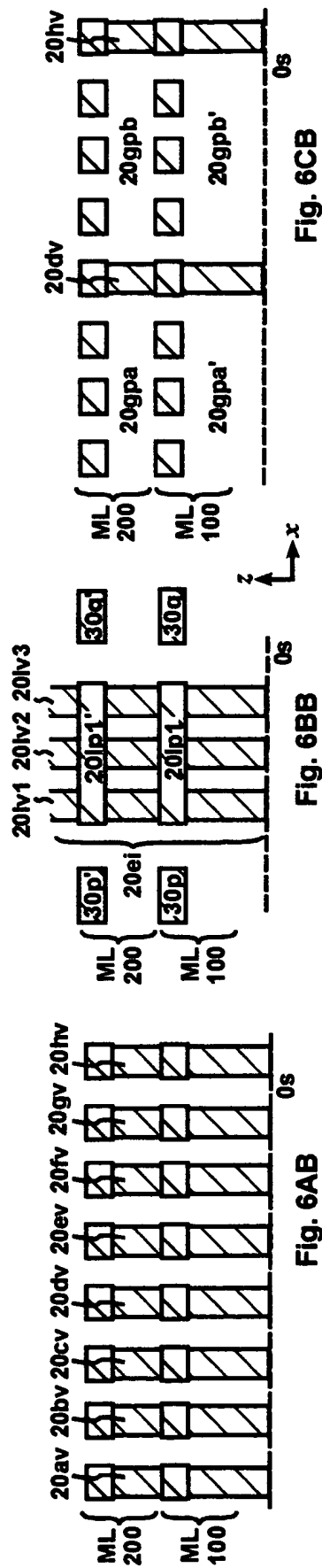


Fig. 6AA



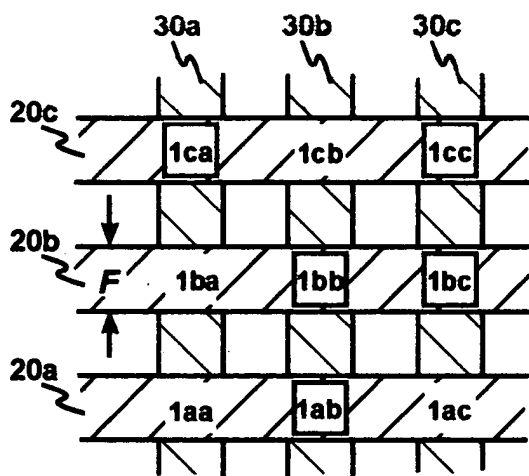


Fig. 8A

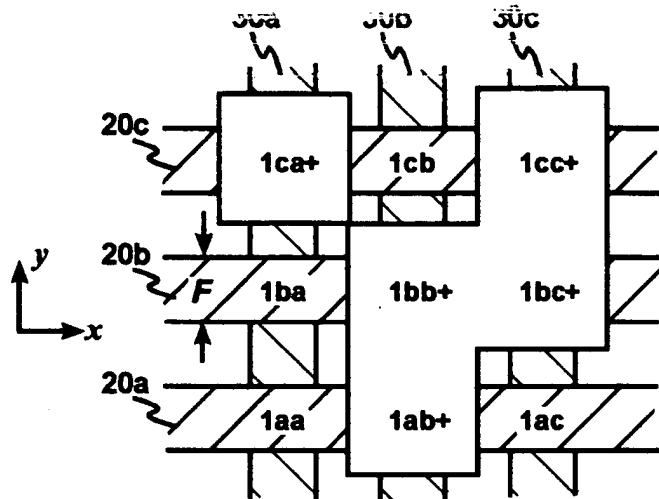


Fig. 8B

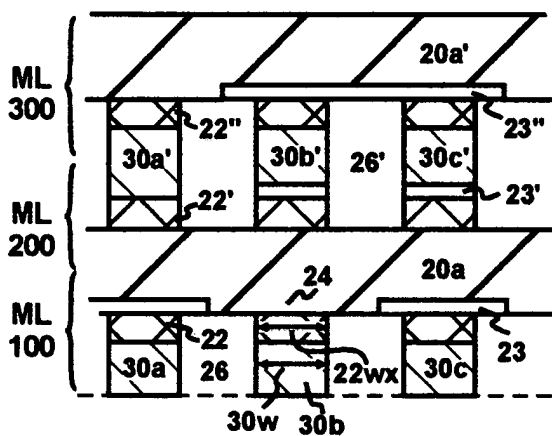


Fig. 9A

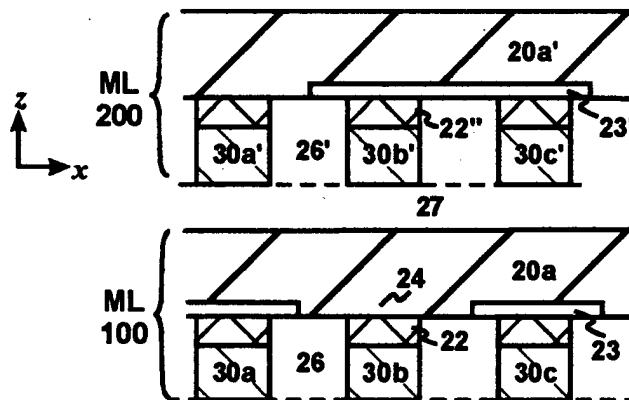


Fig. 9C

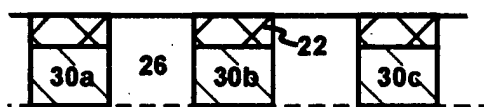


Fig. 9BA

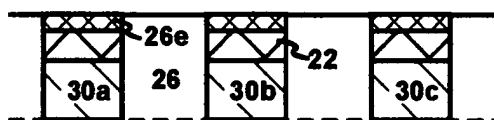


Fig. 9BA'

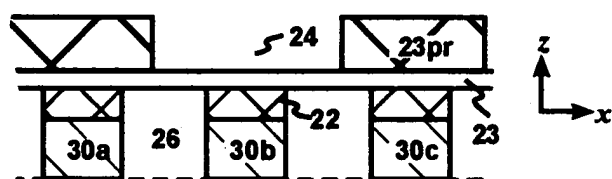


Fig. 9BB

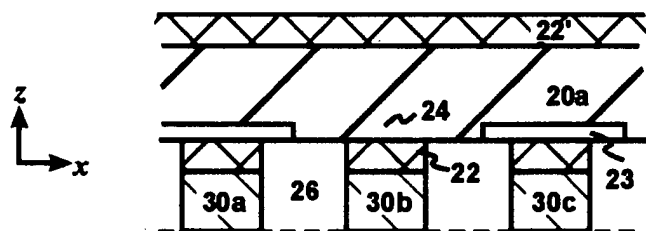


Fig. 9BC

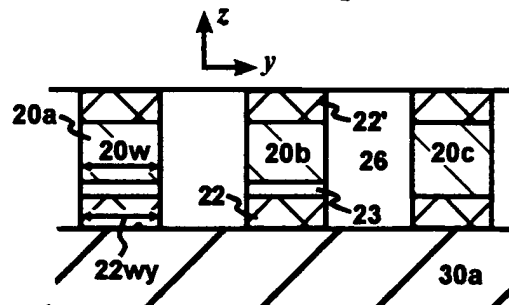


Fig. 9BD

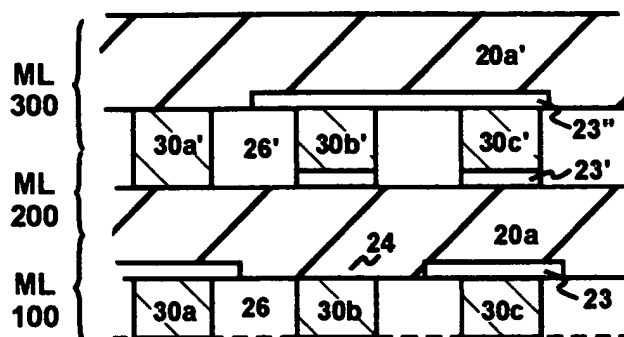


Fig. 10A

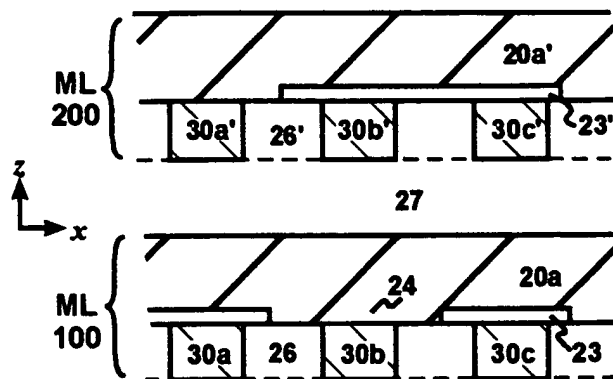


Fig. 10D

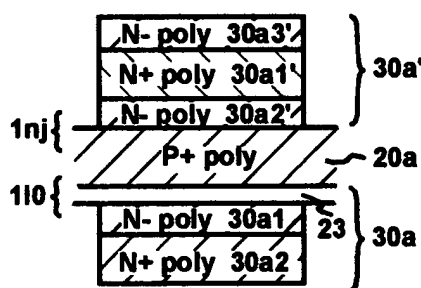


Fig. 10BA

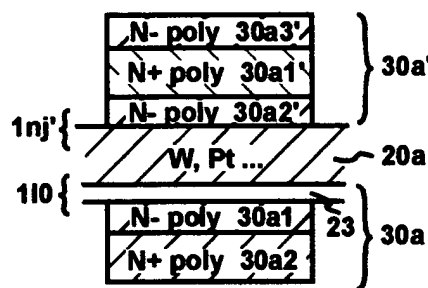


Fig. 10BB

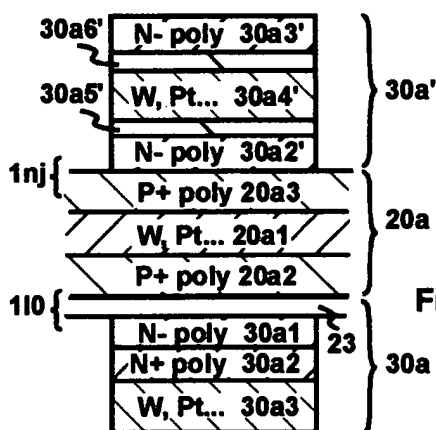


Fig. 10BC

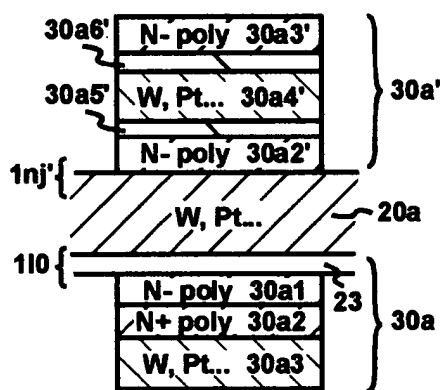


Fig. 10BD



Fig. 10CA

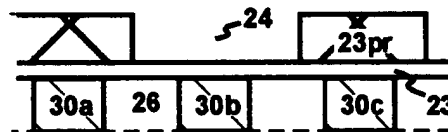


Fig. 10CB

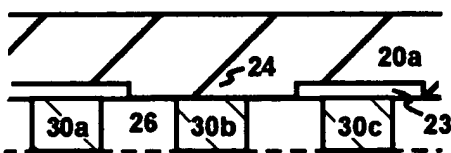


Fig. 10CC

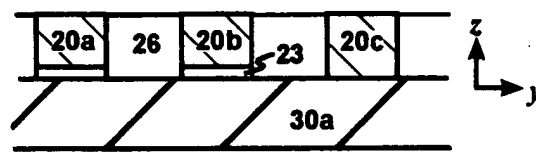


Fig. 10CD

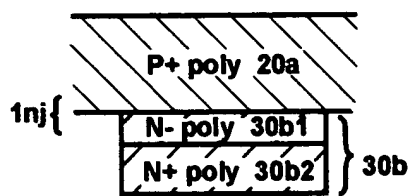


Fig. 10EA

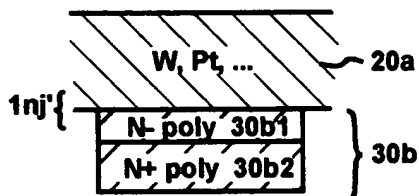


Fig. 10EB

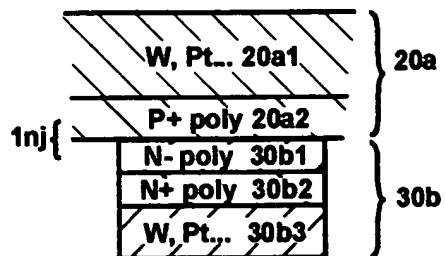


Fig. 10EC

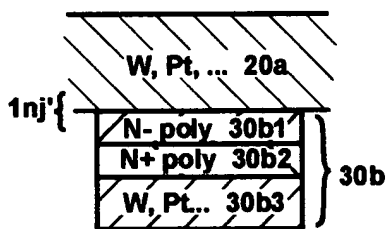


Fig. 10ED

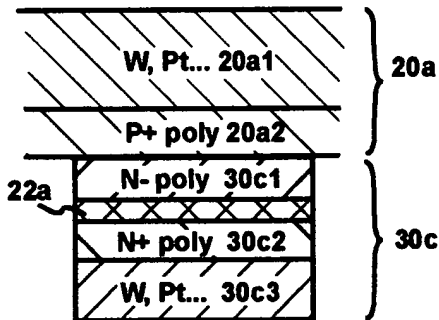


Fig. 11A

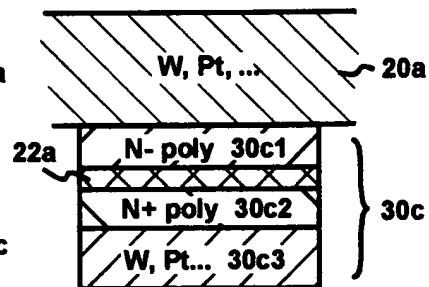


Fig. 11B

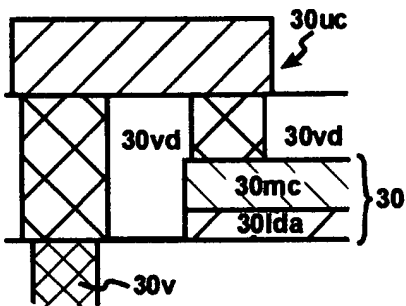


Fig. 12AA

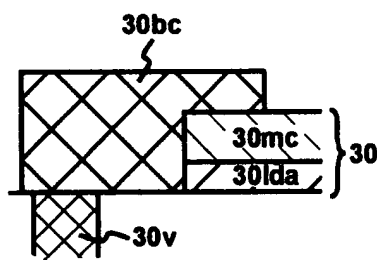


Fig. 12AB

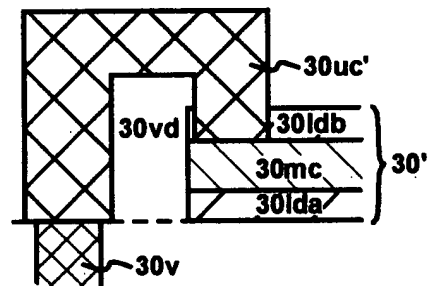


Fig. 12BA

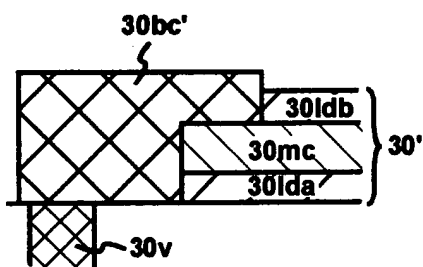


Fig. 12BB

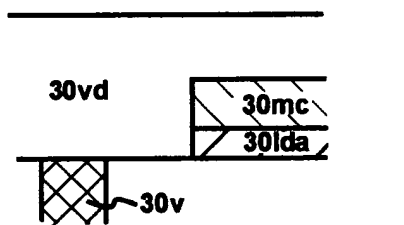


Fig. 12CA

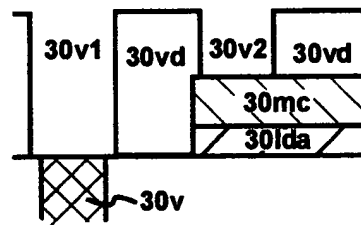


Fig. 12CB

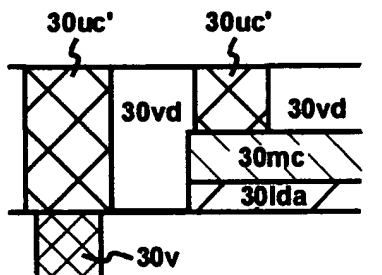


Fig. 12CC

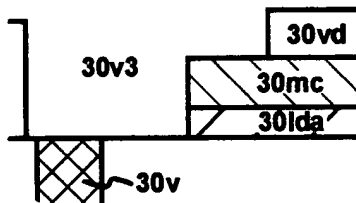


Fig. 12CB'

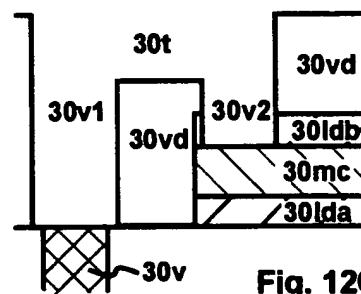


Fig. 12CB''

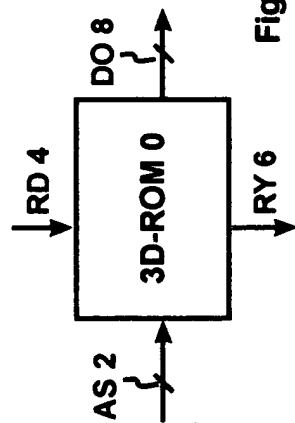


Fig. 13A

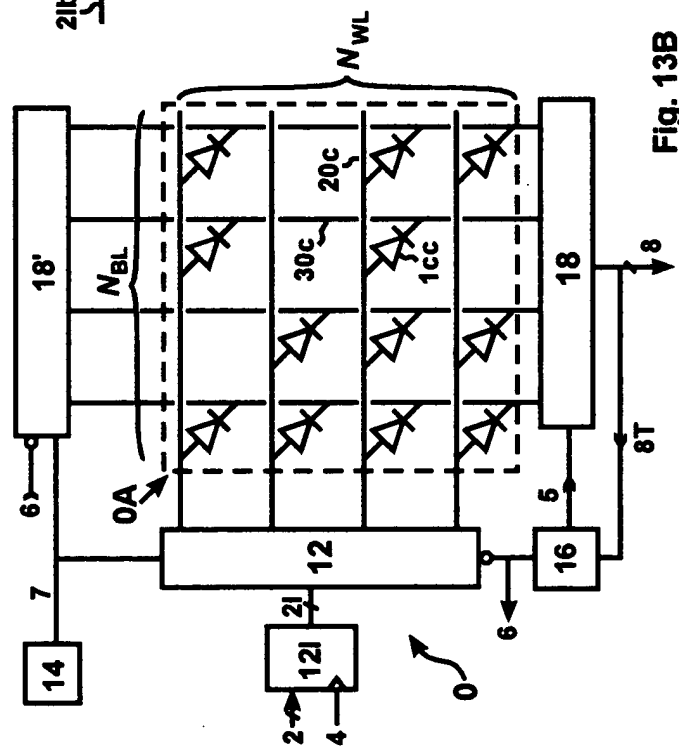


Fig. 13B

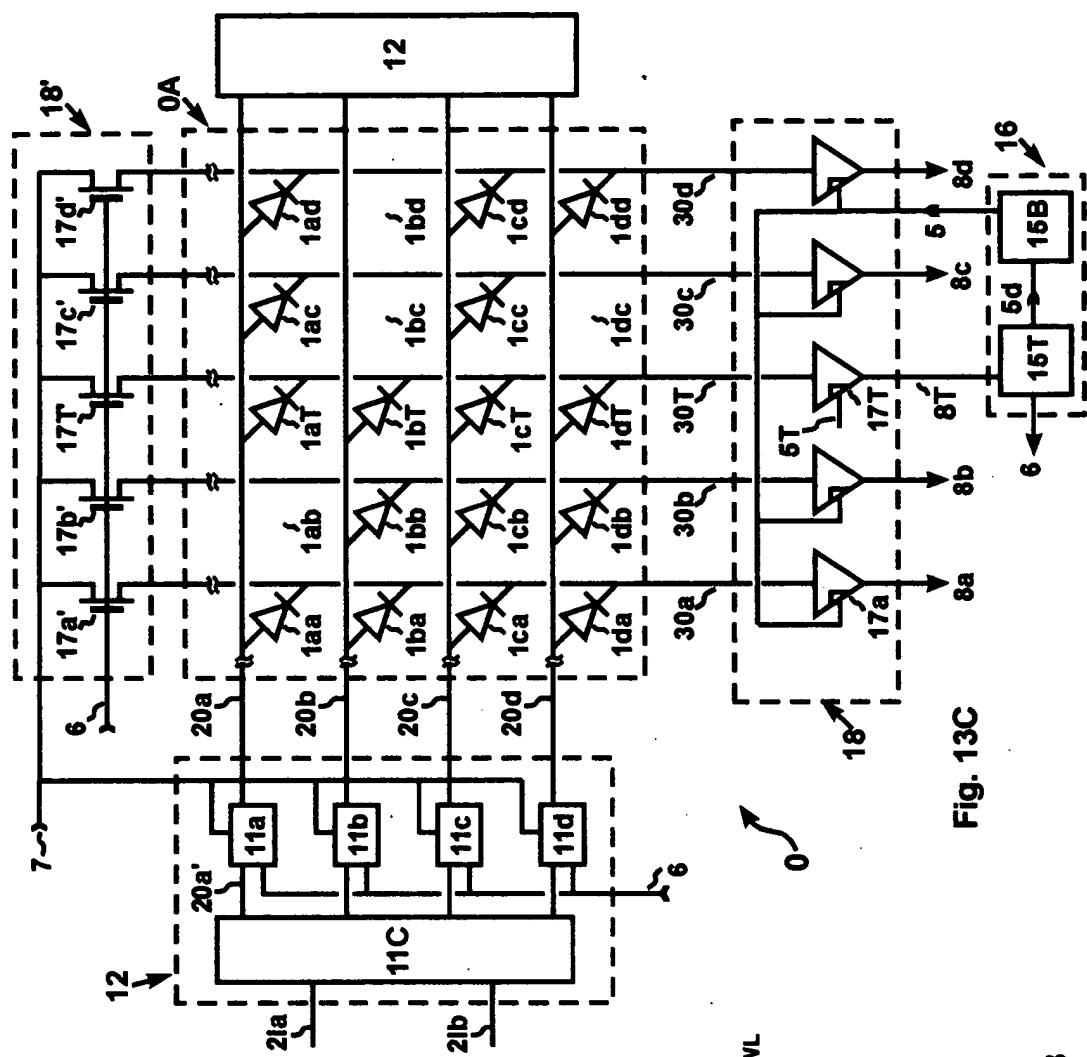


Fig. 13C

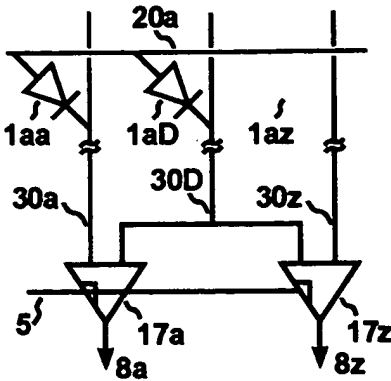


Fig. 14A

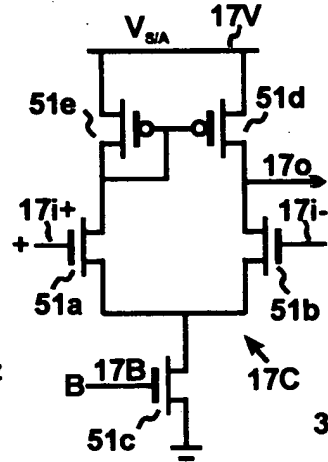


Fig. 14BA

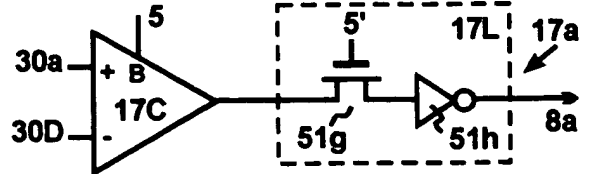


Fig. 14BB

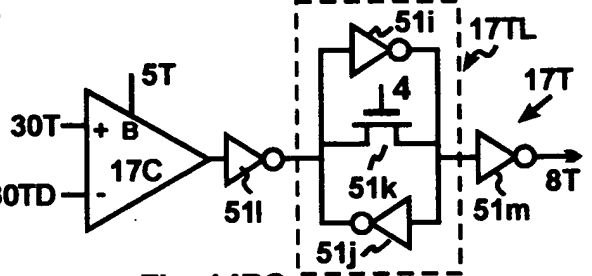


Fig. 14BC

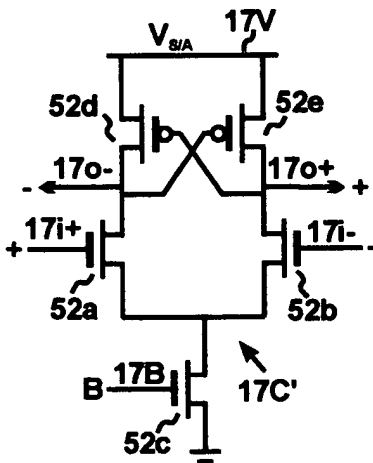


Fig. 14CA

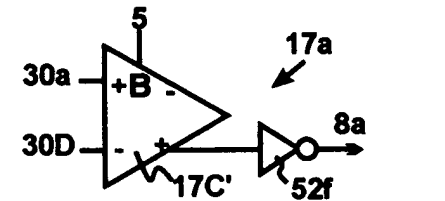


Fig. 14CB

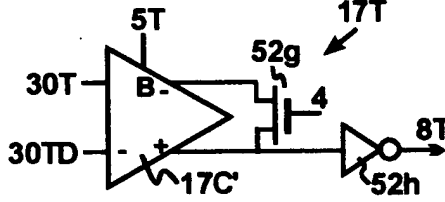


Fig. 14CC

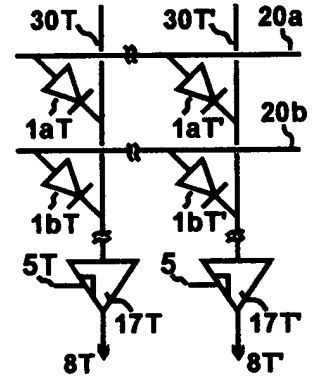


Fig. 14DA

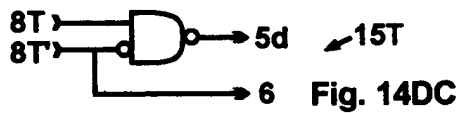


Fig. 14DC

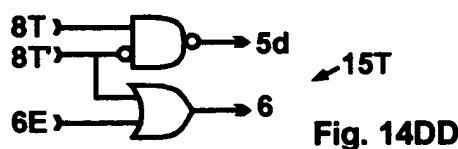


Fig. 14DD

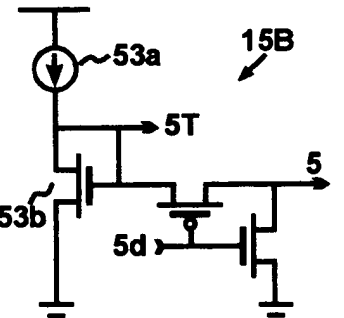


Fig. 14E

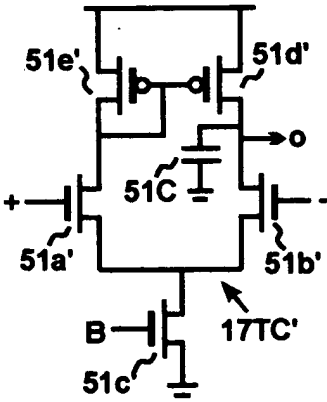


Fig. 14DB

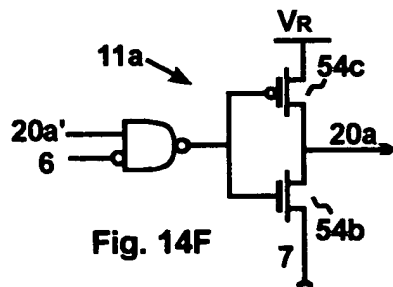


Fig. 14F

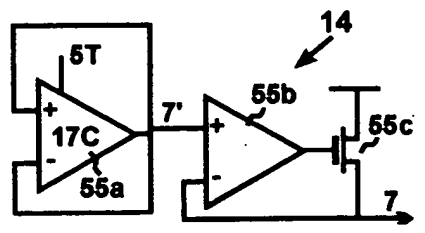


Fig. 14G

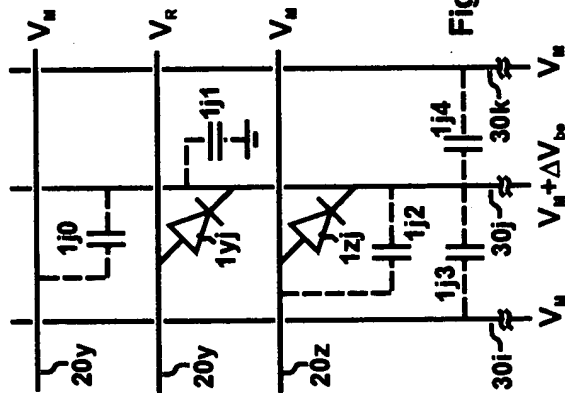


Fig. 15AA

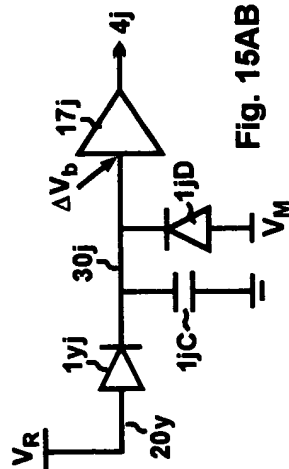


Fig. 15AB

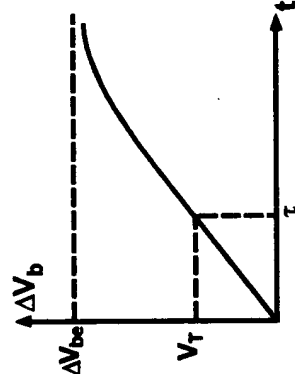


Fig. 15AD

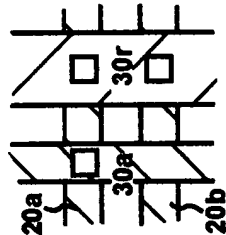


Fig. 15CA

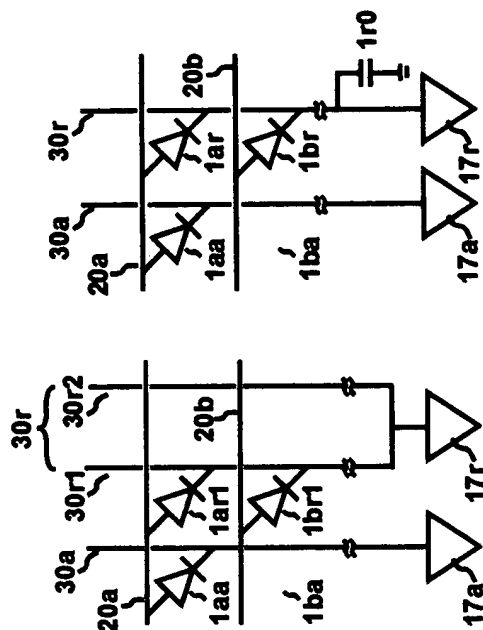


Fig. 15CB

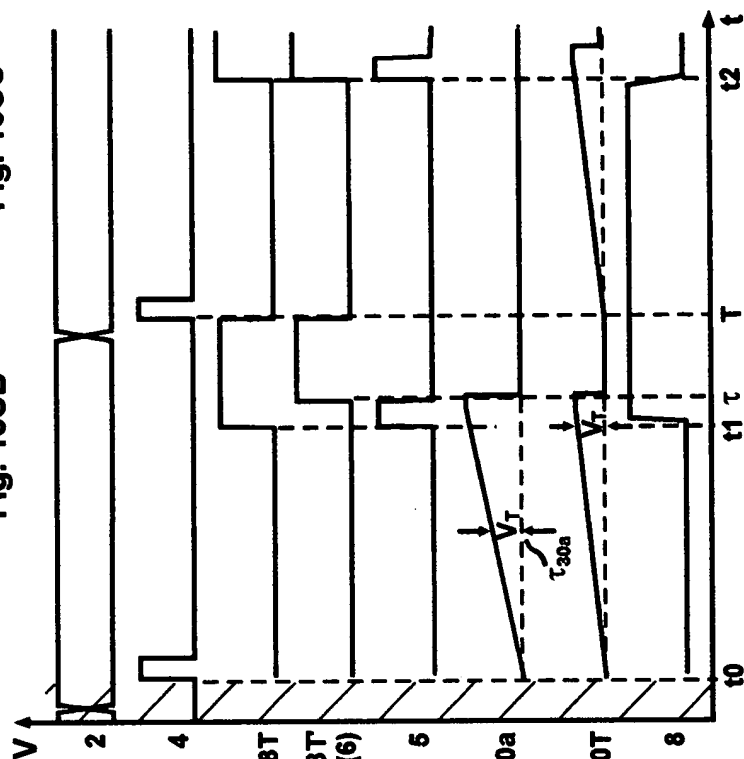


Fig. 16

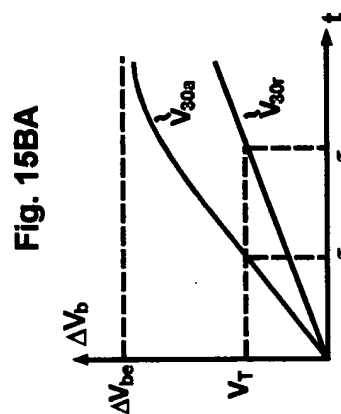


Fig. 15BA

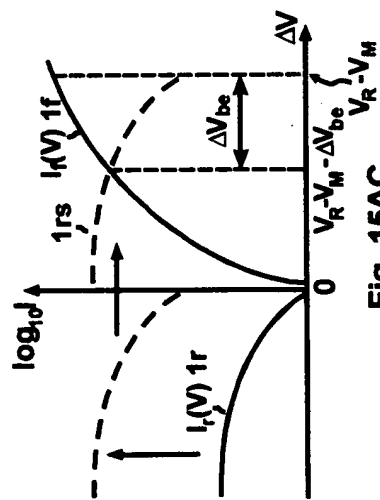


Fig. 15AC

Fig. 15BB

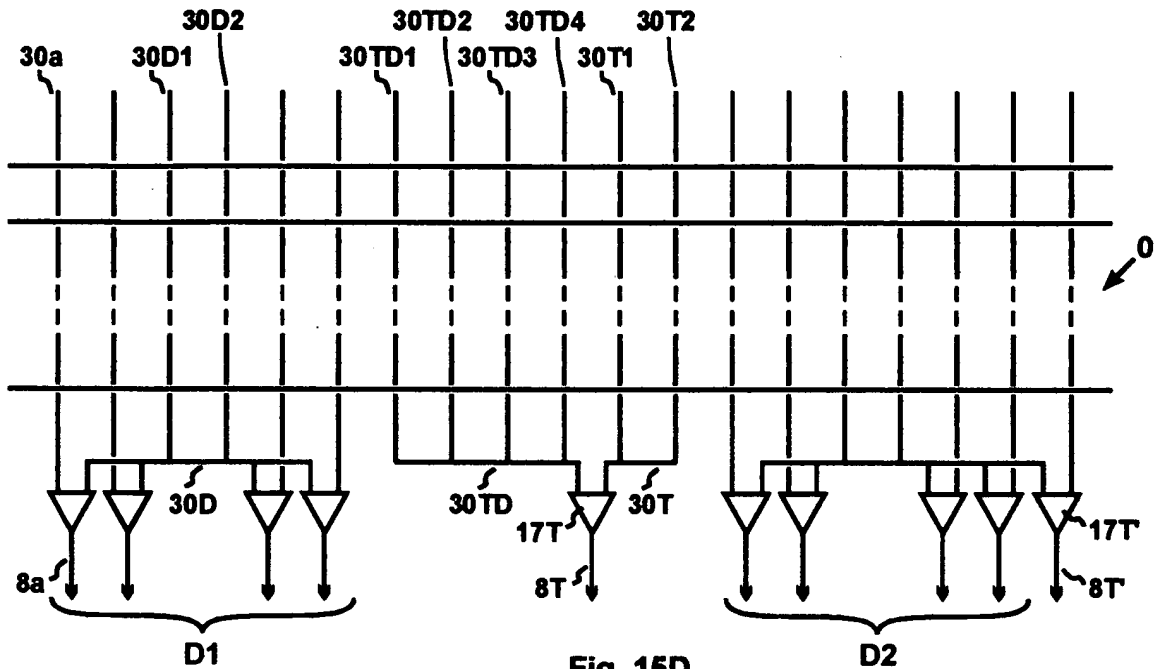


Fig. 15D

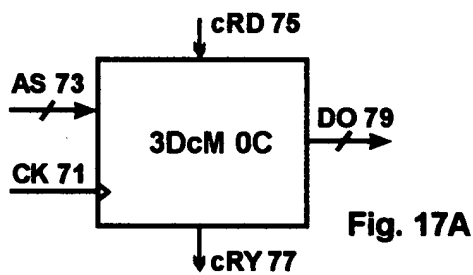


Fig. 17A

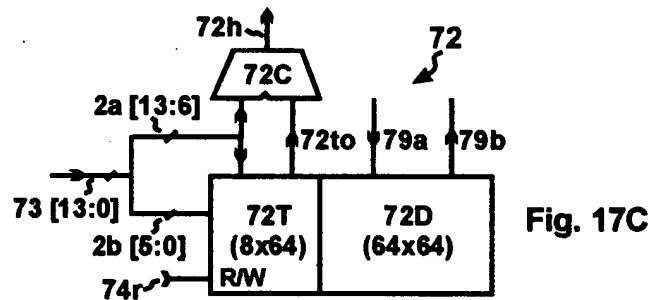


Fig. 17C

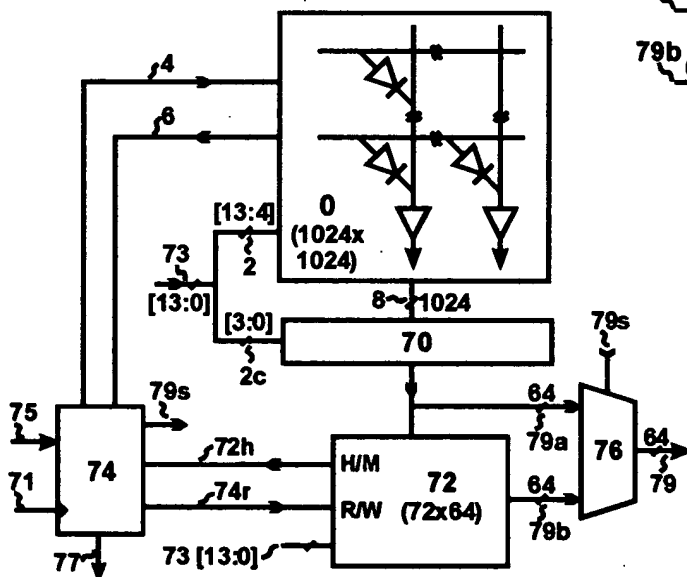


Fig. 17B

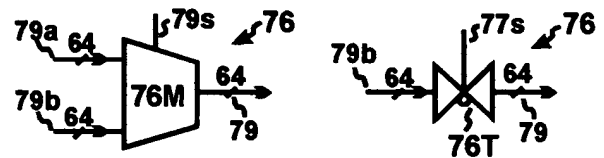


Fig. 17EA

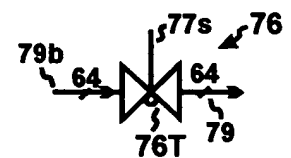


Fig. 17EC

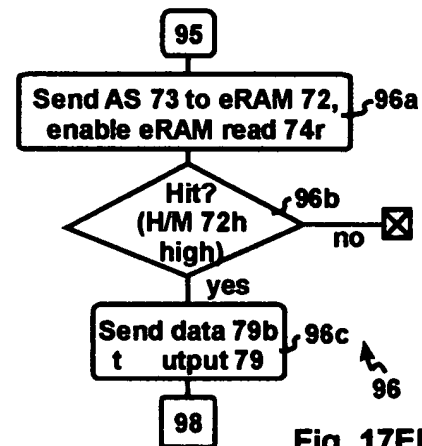
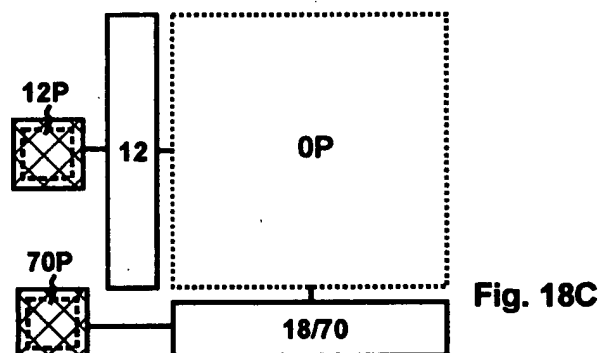
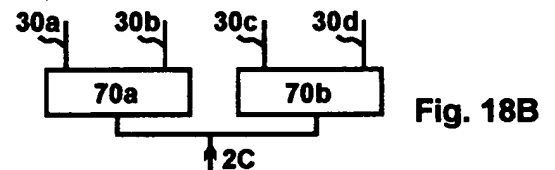
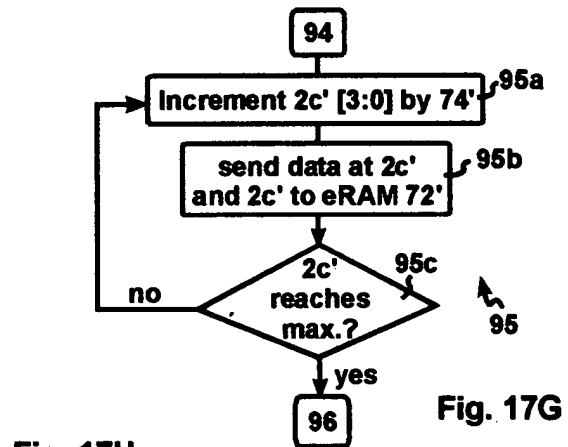
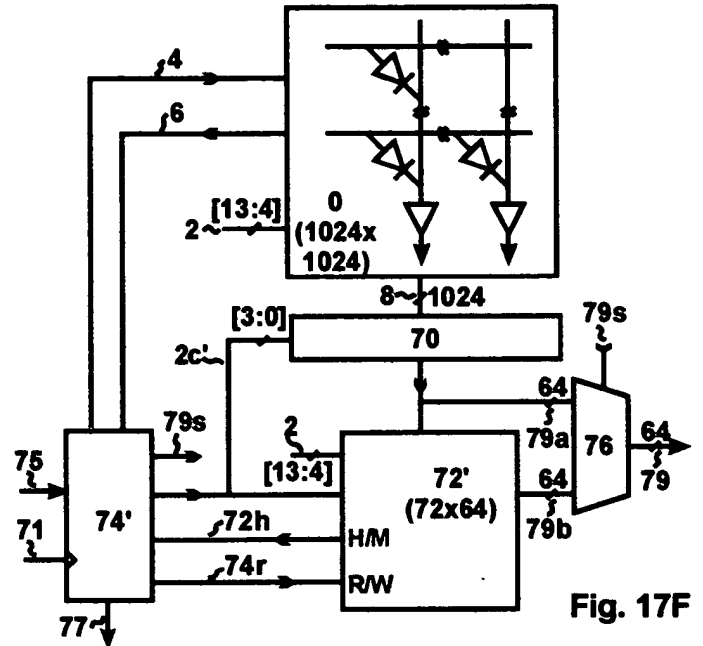
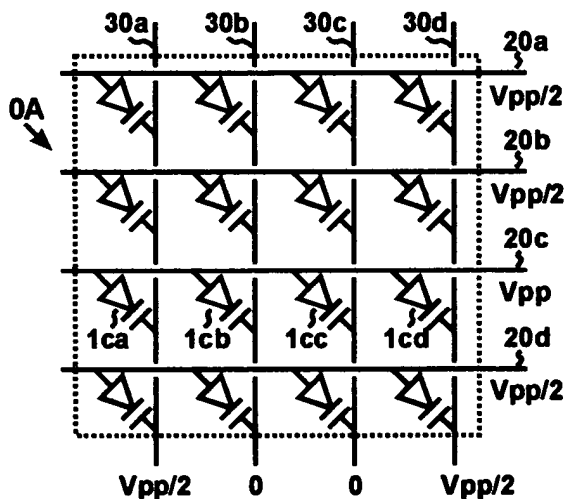
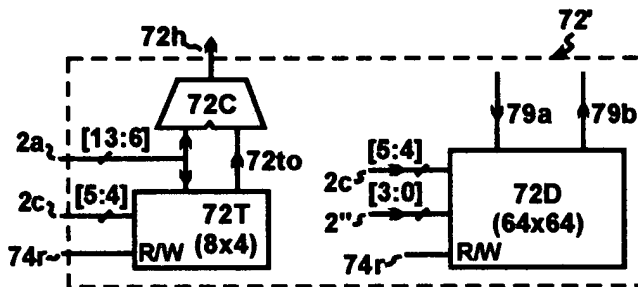
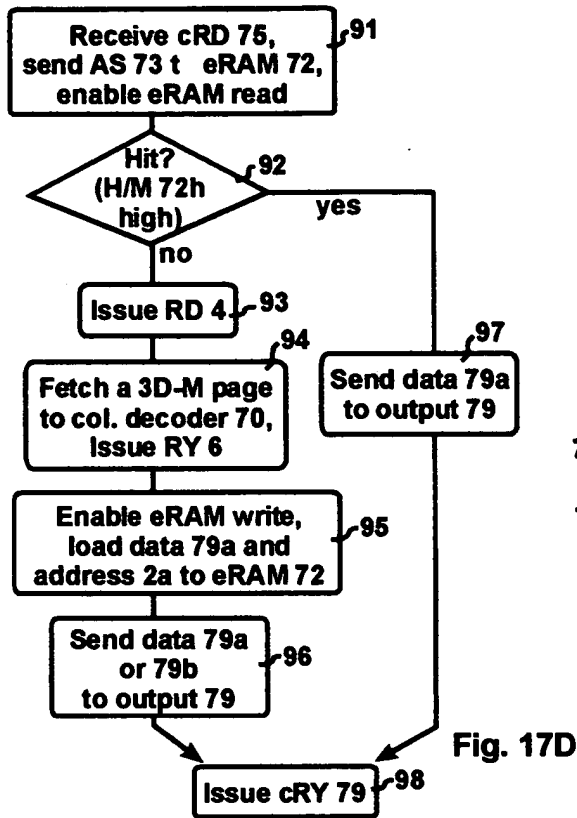


Fig. 17EB



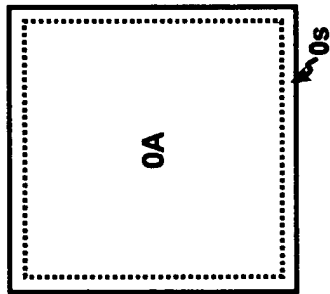


Fig. 19AA

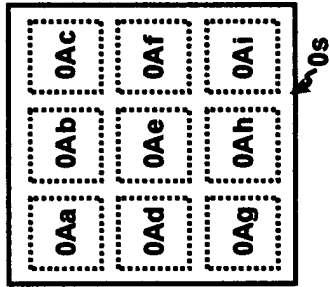


Fig. 19AB

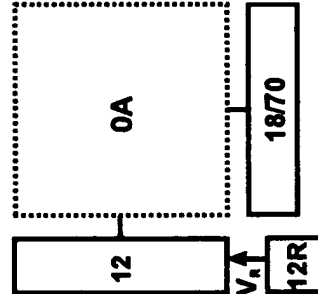


Fig. 19CB

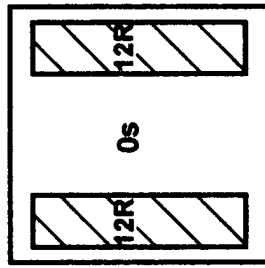


Fig. 19CC

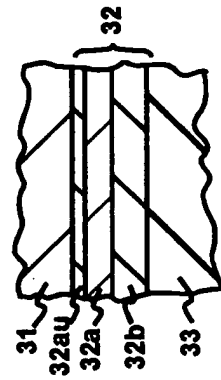


Fig. 19EB

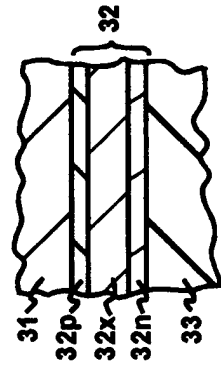


Fig. 19EC

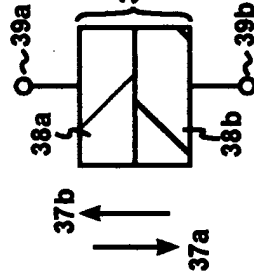


Fig. 19D

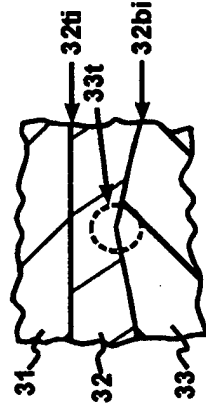


Fig. 19F

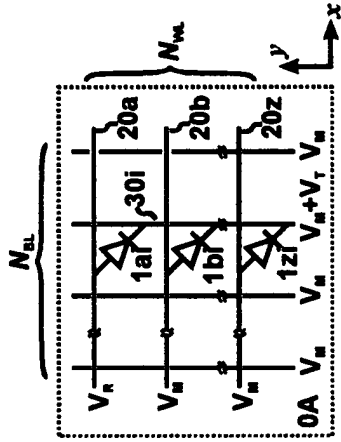


Fig. 19B

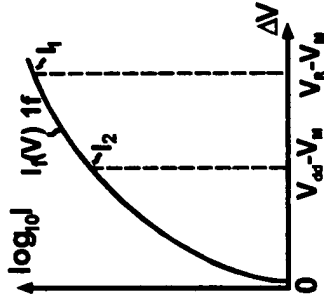


Fig. 19CA

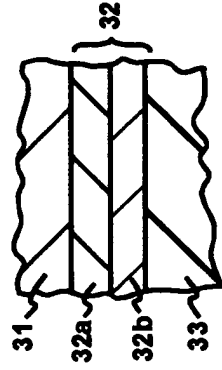


Fig. 19EA

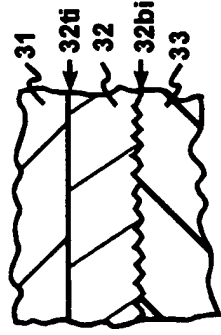


Fig. 19G

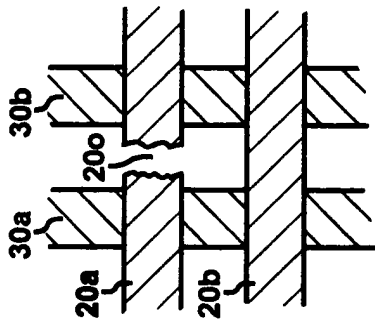


Fig. 20AA

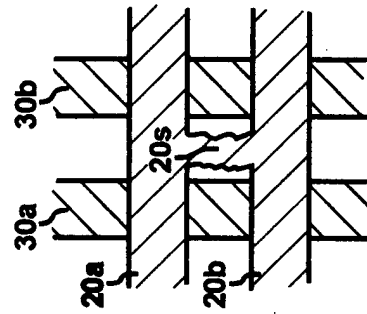


Fig. 20AB

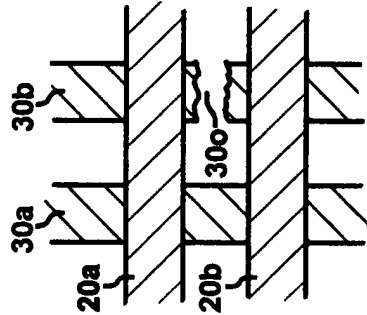


Fig. 20BA

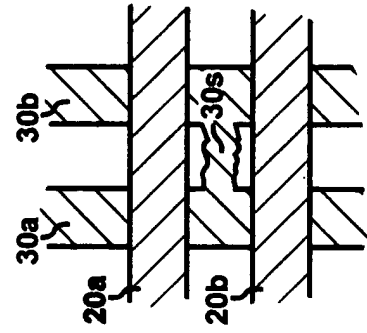


Fig. 20BB

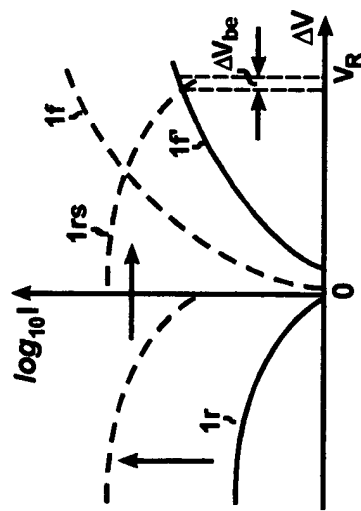


Fig. 20CA

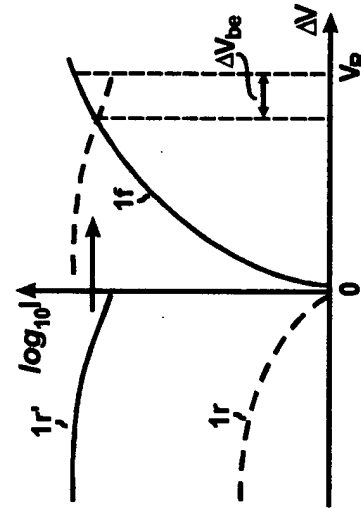


Fig. 20CB

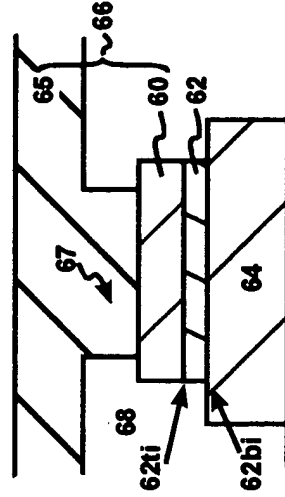


Fig. 21A

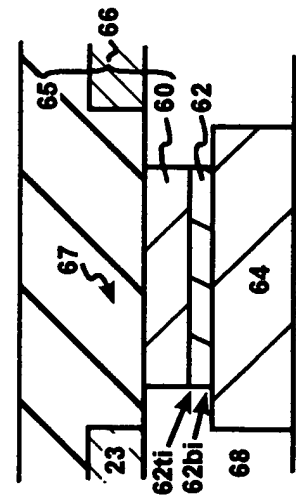


Fig. 21B

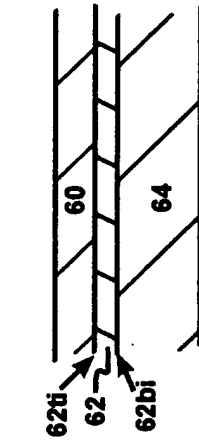


Fig. 22AA

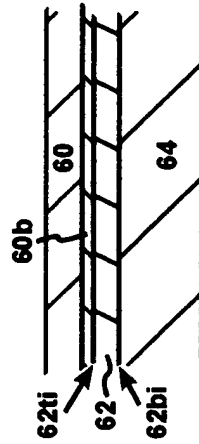


Fig. 22AB

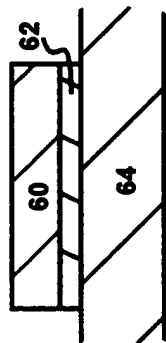


Fig. 22BA

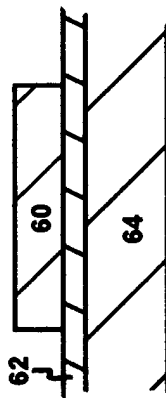


Fig. 22BB

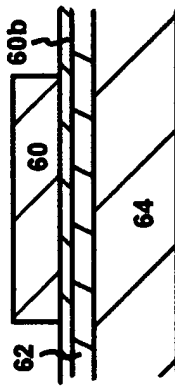


Fig. 22BC

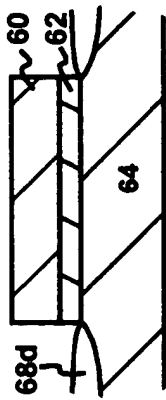


Fig. 22CA

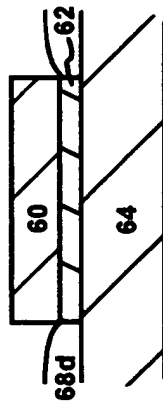


Fig. 22CB

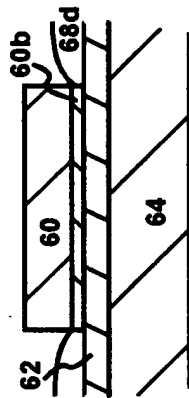


Fig. 22CC

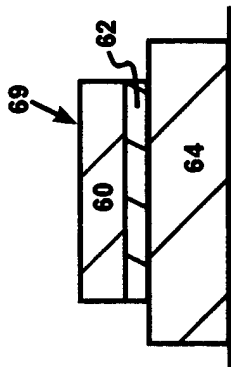


Fig. 22D

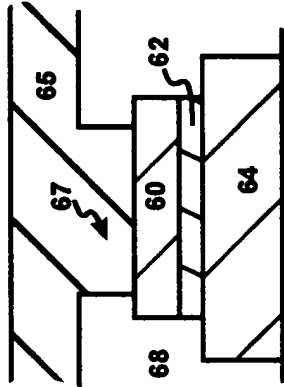


Fig. 22E

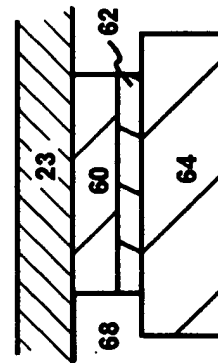


Fig. 22D'

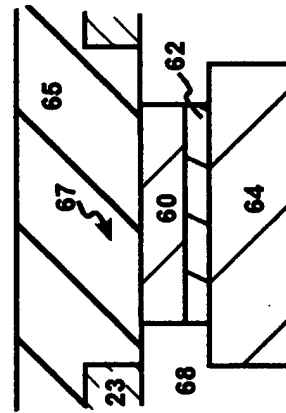


Fig. 22E'

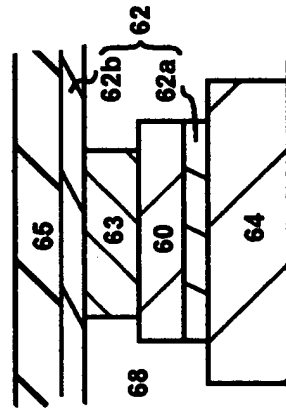


Fig. 23A

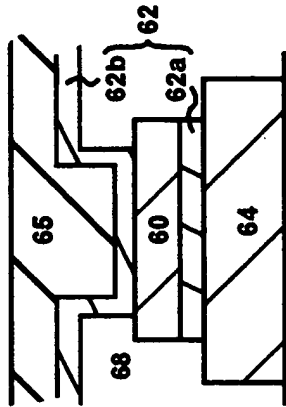
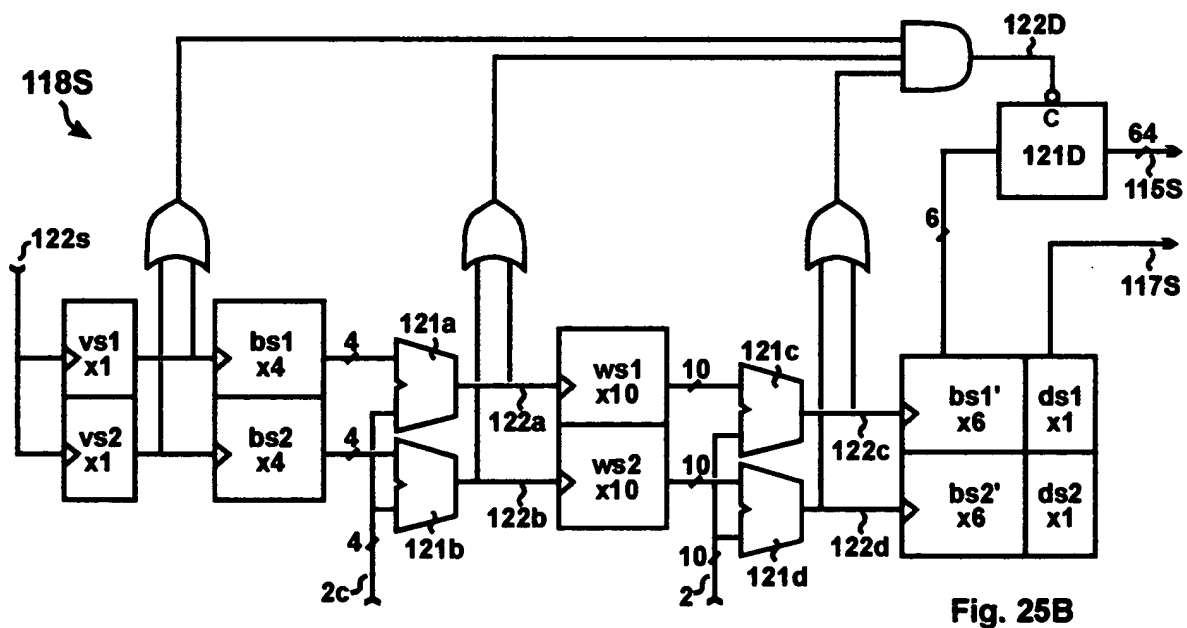
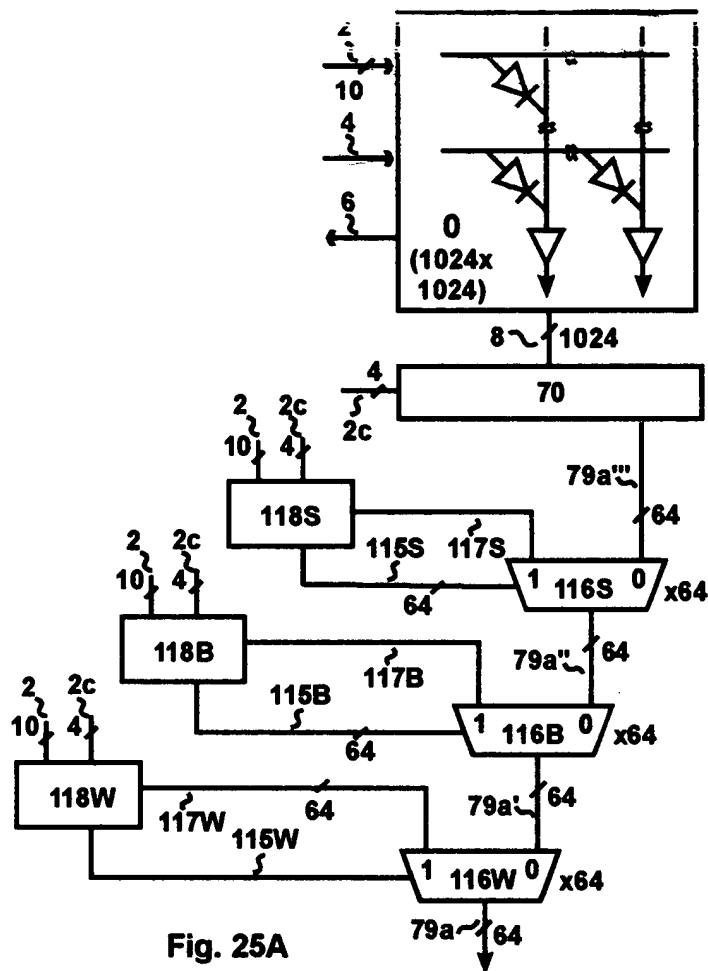
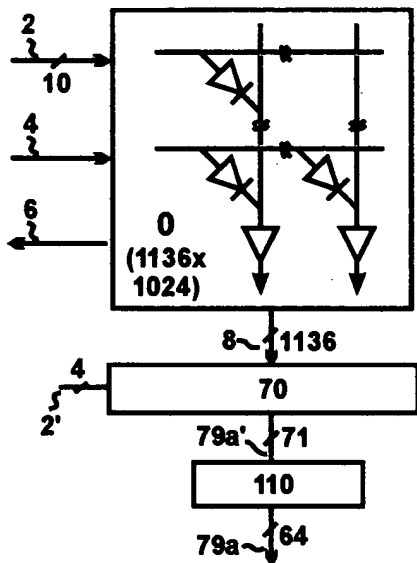
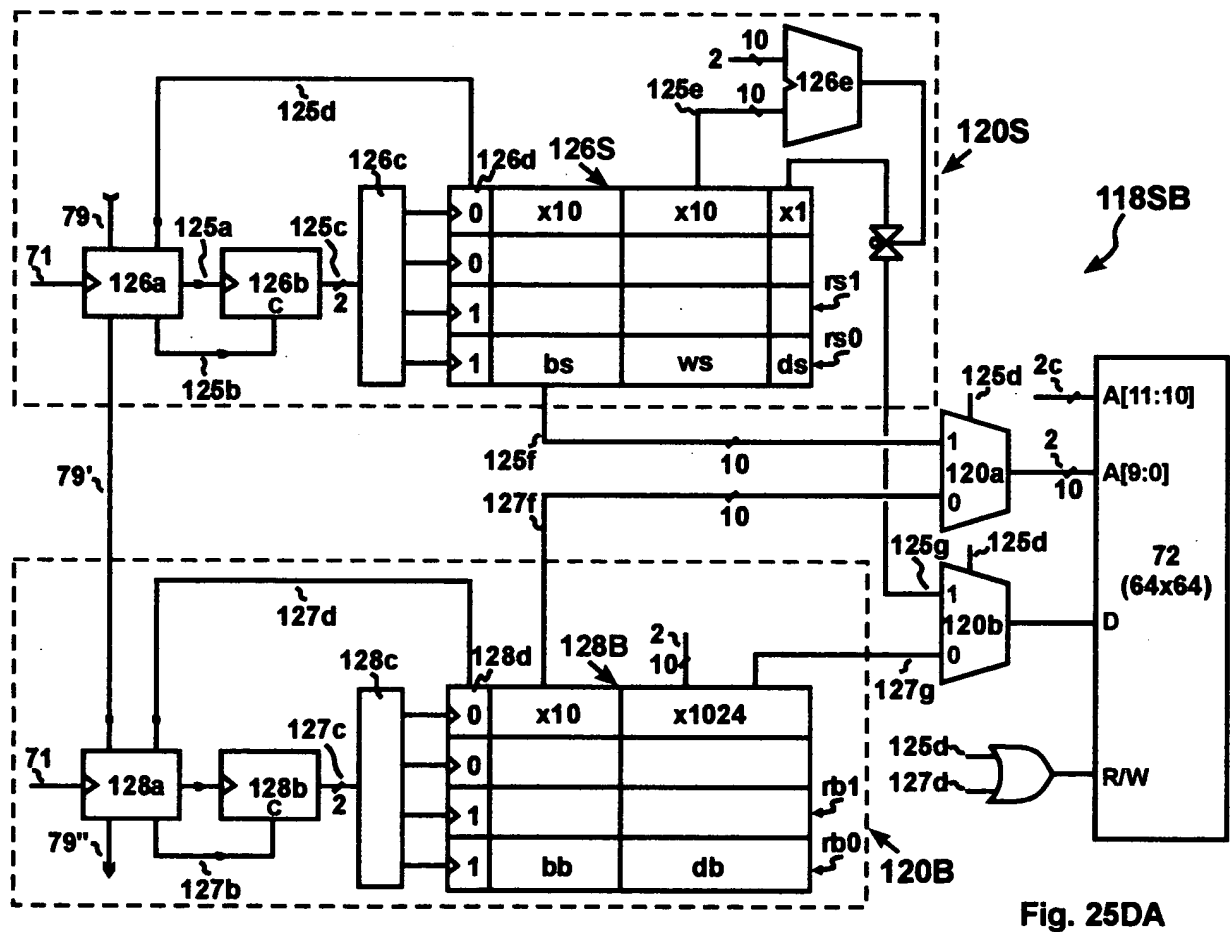
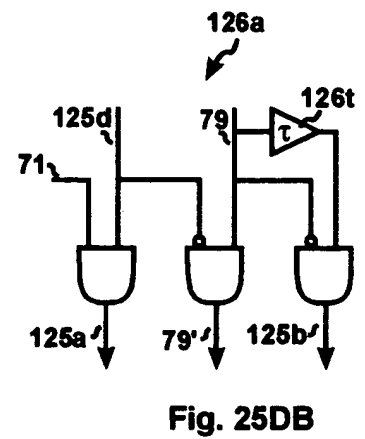
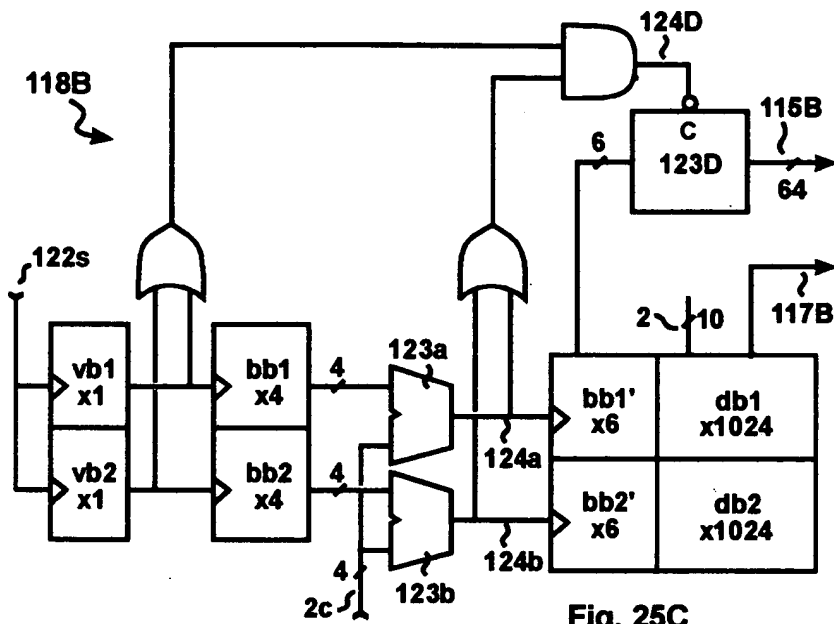
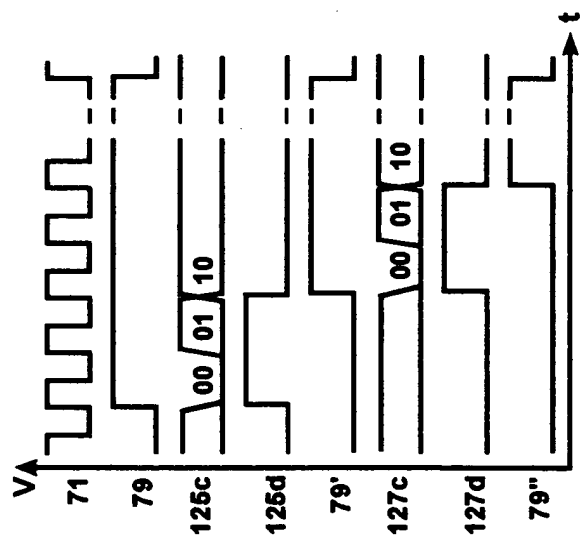
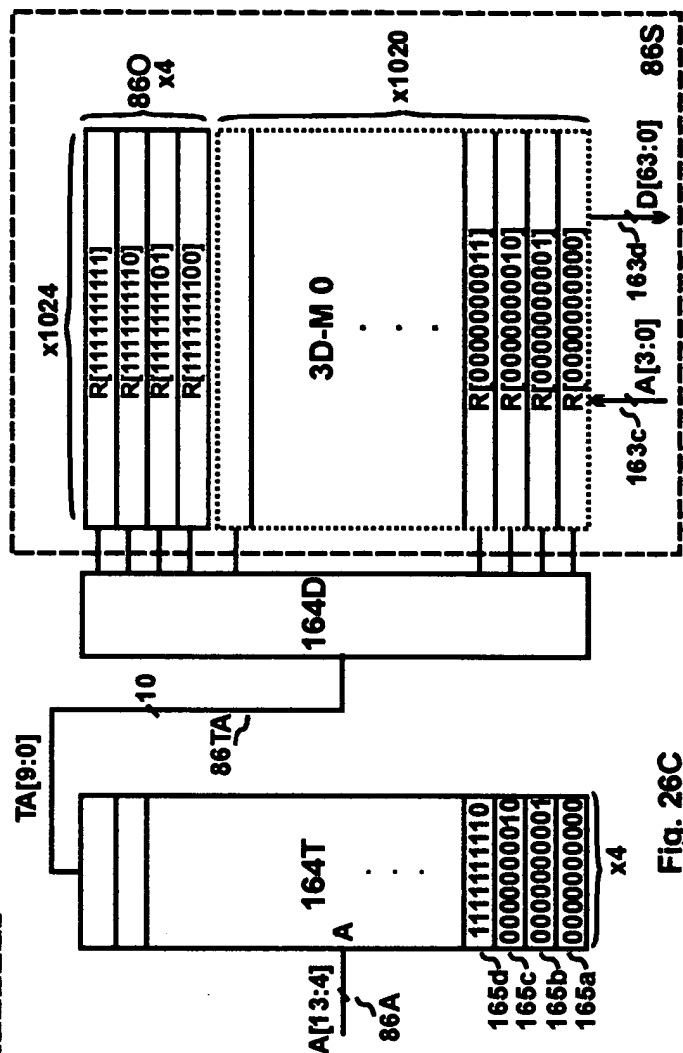
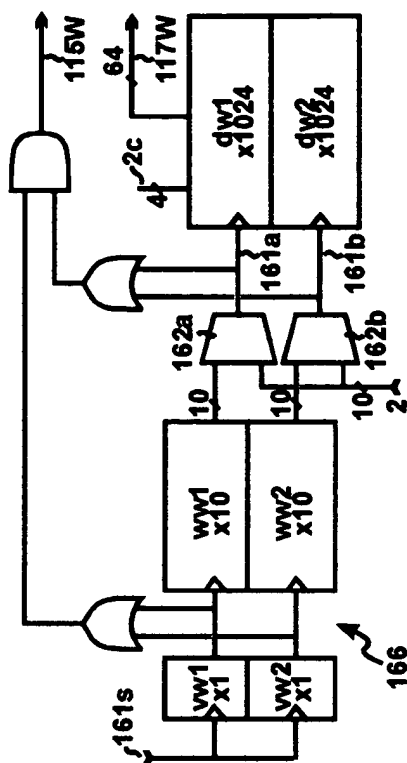
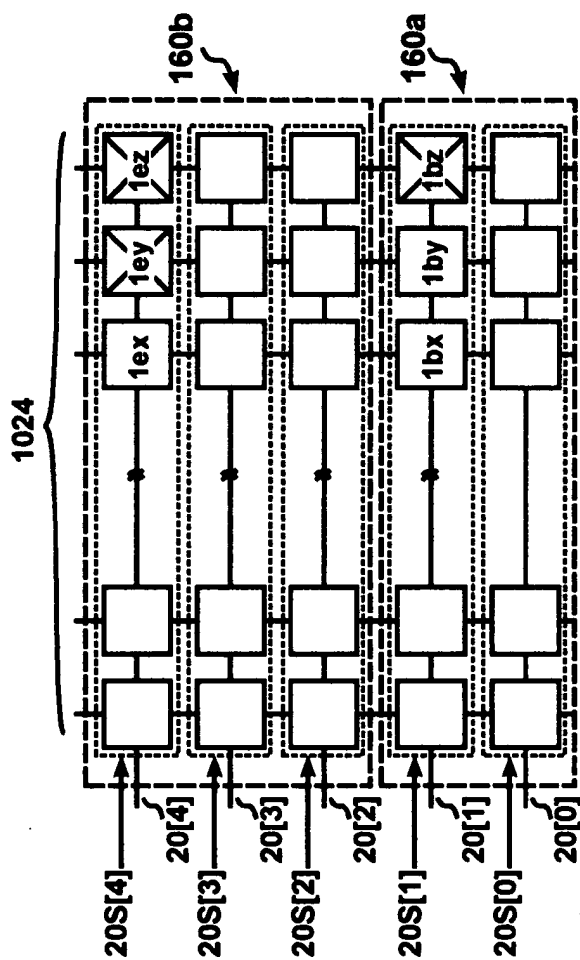


Fig. 23B







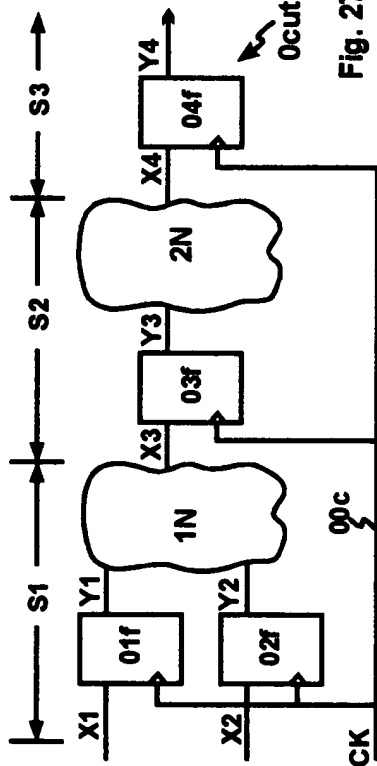


Fig. 27A

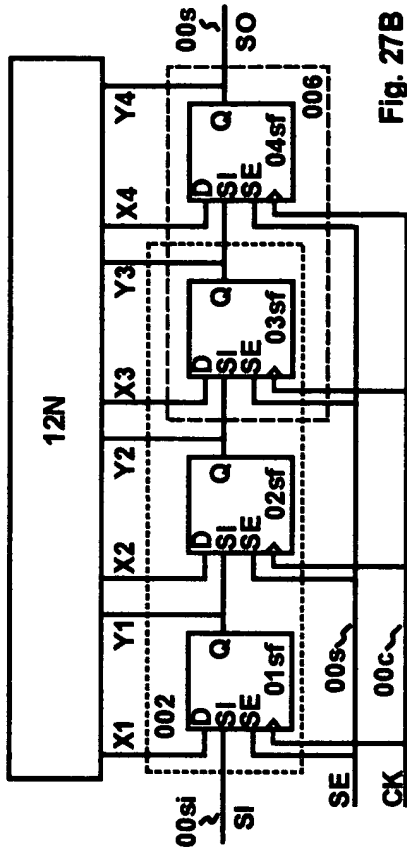


Fig. 27B

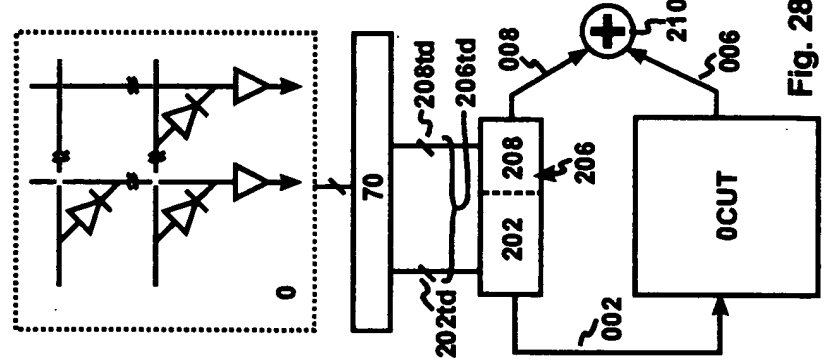


Fig. 28A

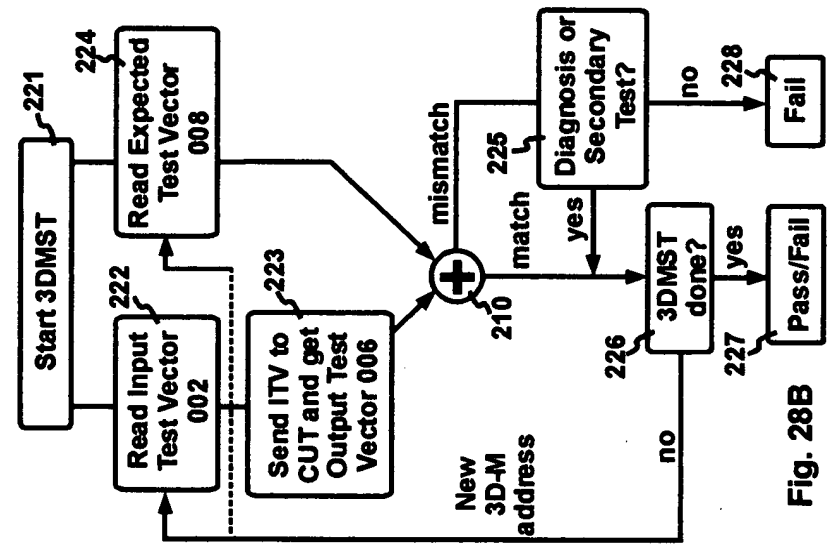


Fig. 28B

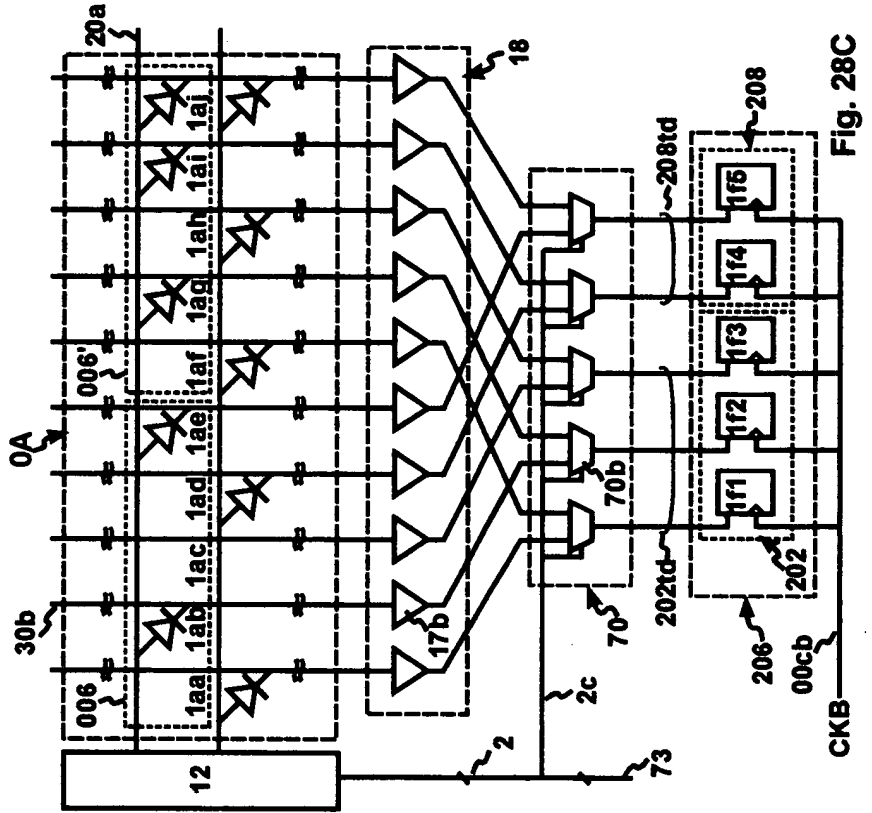


Fig. 28C

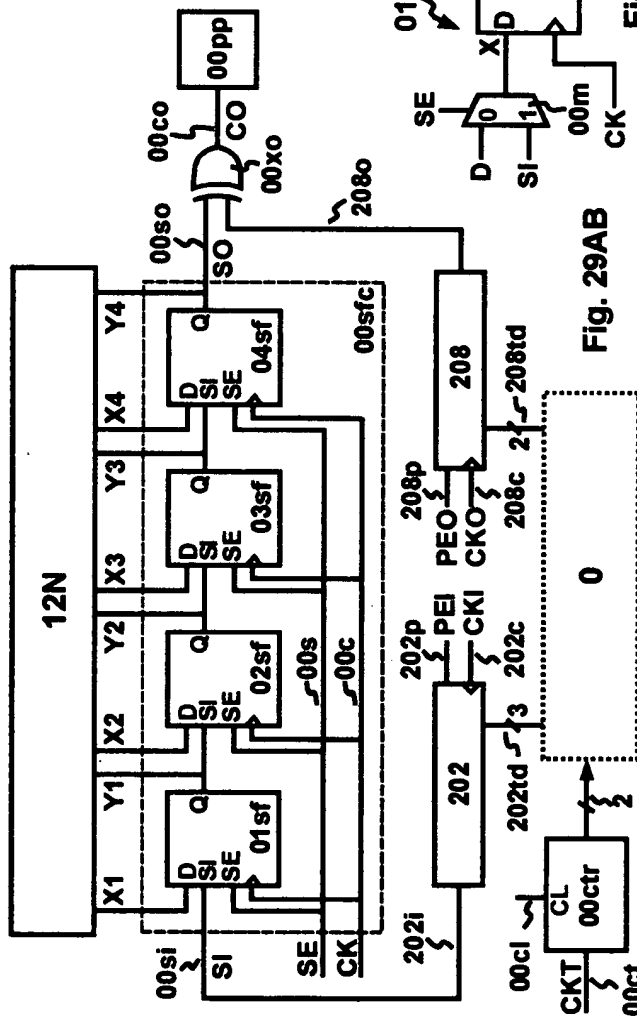


Fig. 29AB

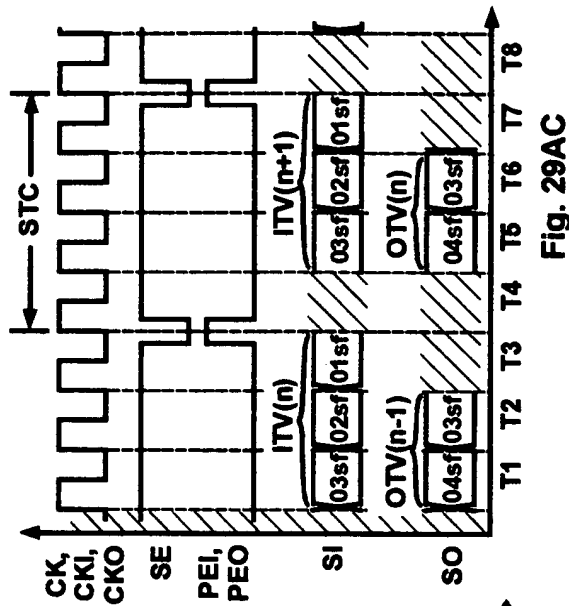


Fig. 29AC

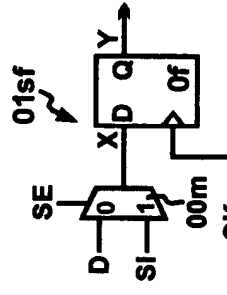


Fig. 29AA

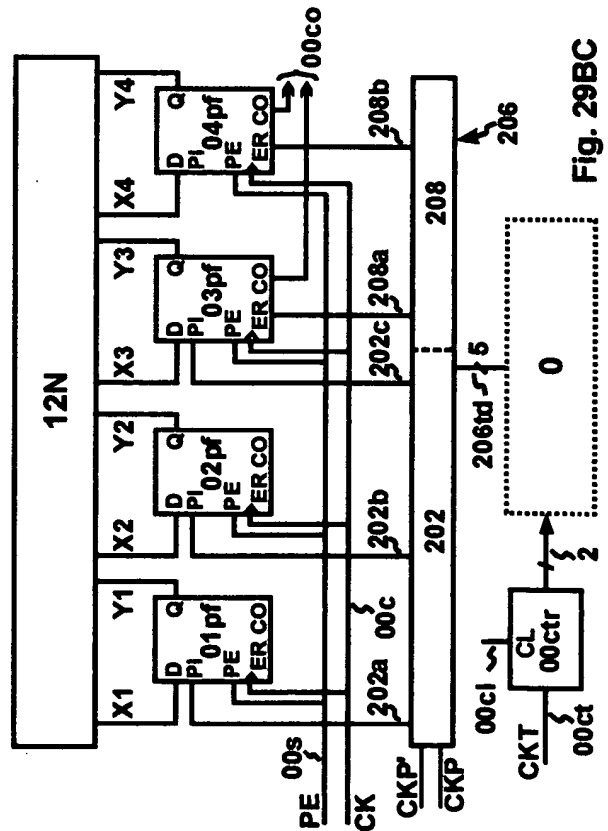


Fig. 29BC

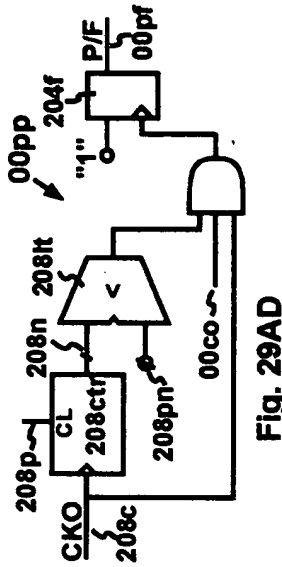


Fig. 29AD

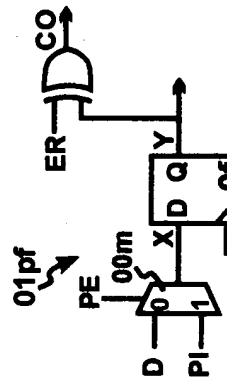


Fig. 29BB

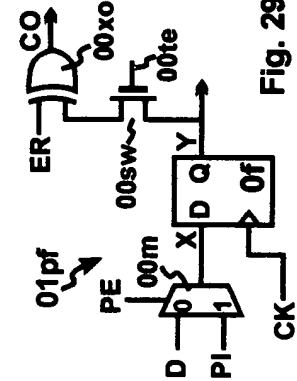


Fig. 29BA

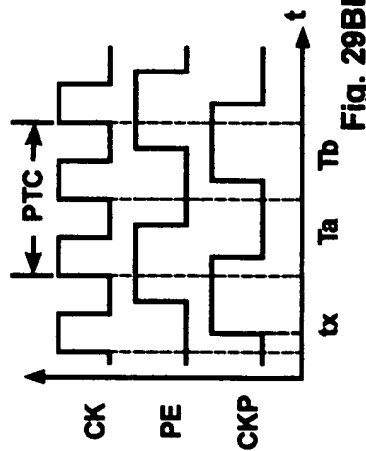
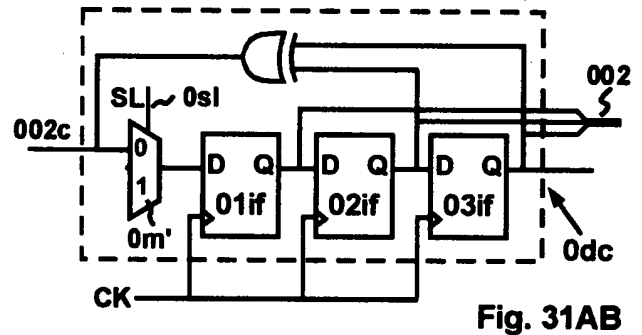
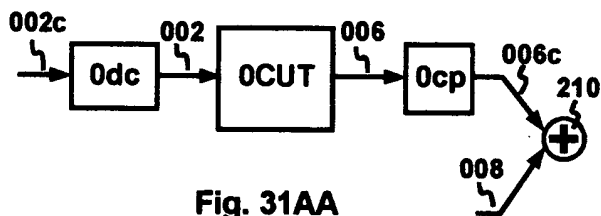
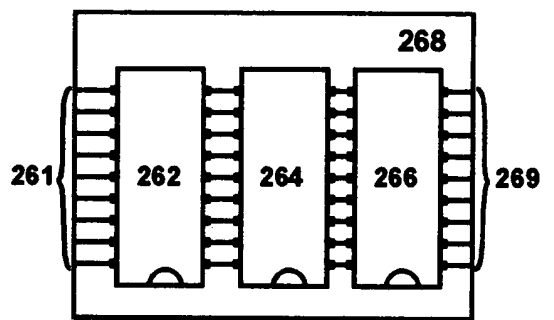
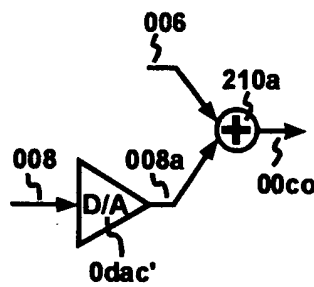
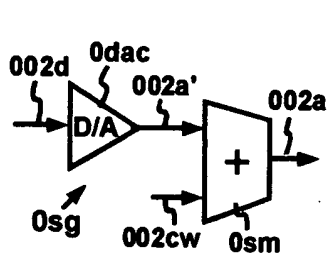
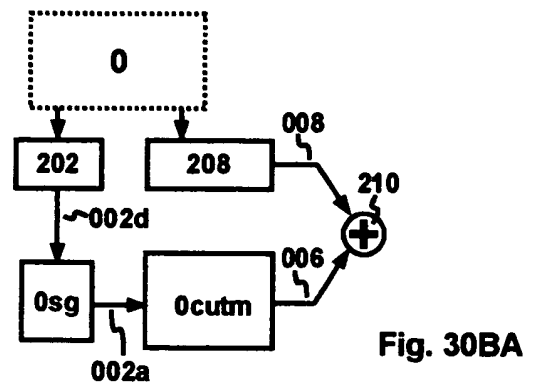
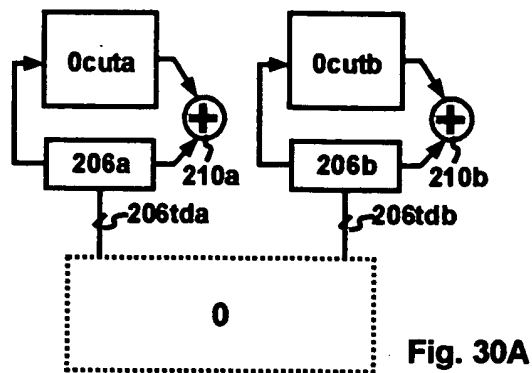


Fig. 29BD



	Test Methodology
Block-level test	BIST, etc.
Chip-level test/ Structural test	3DMST (optionally with EST)

Fig. 31BA

	Test Methodology
High-speed test, critical test vectors	3DMST (optionally with BIST)
Medium- to low-speed test	EST

Fig. 31BB

